

1982

# Census of Manufactures

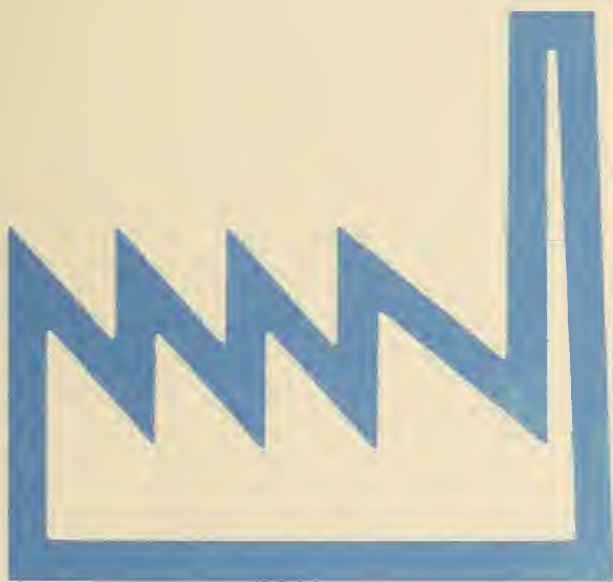
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MC82-S-7

SUBJECT SERIES

## Concentration Ratios In Manufacturing

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The publications  
from the 1982 Economic and  
Agriculture Censuses are dedicated  
to the memory of Shirley Kallek,  
Associate Director for Economic Fields.  
During her career at the Bureau of the  
Census (1955 to 1983), she continually  
directed efforts to improve  
the timeliness and accuracy of  
economic statistics.

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Issued April 1986



**U.S. Department of Commerce**  
**Malcolm Baldrige**, Secretary  
**Clarence J. Brown**, Deputy Secretary  
**Sidney Jones**, Under Secretary for  
Economic Affairs

**BUREAU OF THE CENSUS**  
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Director

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**Economic and Agriculture Censuses**

**INDUSTRY DIVISION**  
**Gaylord E. Worden, Chief**

**ACKNOWLEDGMENTS**—Many persons participated in the various activities of the 1982 Census of Manufactures. Primary direction of the program was performed by **Shirley Kallek**, Associate Director for Economic Fields (until May 1983), **Charles A. Waite**, her successor, and **Michael G. Farrell**, Assistant Director for Economic and Agriculture Censuses (until August 1984), and **John H. Berry**, his successor.

This report was prepared in the Industry Division under the general direction of **Roger H. Bugenhagen**, Chief (until April 1983), and **Gaylord E. Worden**, his successor. **John P. Govoni**, Assistant Chief for Census/Annual Survey of Manufactures (ASM) Programs, was responsible for the overall management of the census of manufactures. He guided the planning and implementation of the project and coordinated activities with other divisions.

Program responsibility was shared by the following individuals who participated importantly in the entire program: **John P. McNamee**, Chief, Minerals Branch; **Dale W. Gordon**, Chief, Census/ASM Durables Branch; **Michael J. Zampogna**, Chief, Census/ASM Nondurables Branch; **Bernard J. Fitzpatrick**, Chief, Census Special Reports Branch (until April 1983); and **Bruce M. Goldhirsch**, his successor; **Kenneth I. Hansen**, Chief, Annual Survey of Manufactures Branch; **Malcolm E. Bernhardt**, Chief, Current Durables Branch; and **Carole A. Ambler**, Chief, Current Nondurables Branch.

**Charles T. Lee, Jr.**, assisted by **Anthony Oliveto**, was directly responsible for the coordination of the review and preparation of this report.

**Dr. Edward A. Robinson**, Senior Industry Statistician, made significant contributions to the basic economic concepts and content of the census. The computer processing systems were developed and coordinated under the direction of **William E. Norfolk**, Assistant Chief for Operations. **Sarah A. Mathis**, Chief, Census Programming Branch, was responsible for implementation of the computer systems, and the computer programs were prepared under the supervision of **David Onions** and **Gerald S. Turnage**, assisted by **Barbara A. Lambert**. The mathematical techniques and quality control requirements were developed by **Preston J. Waite**, Assistant Chief for Research and Methodology, assisted by **Stacey Cole**, **Pamela McKee**, **Amelia M. Perego**, **Margdalena Ramos**, and **Ann M. Stephens**.

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# INTRODUCTION

## ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was again taken for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was obtained first in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was taken first for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service industries was broadened from "selected services" to "all services, except religious organizations and private households." A total of 41 additional four-digit standard industrial classifications<sup>1</sup> (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade,

and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was introduced first in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

## USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are disseminated widely by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

## AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-00500176-0.



in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

## CENSUS OF MANUFACTURES

### General

The 1982 Census of Manufactures is the 31st census of manufactures of the United States. For 1982, it was conducted jointly with the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses.

This report, from the 1982 Census of Manufacturers, is one of nine subject reports, each of which provides statistics on selected topics pertinent to the manufacturing sector. Several of these reports consolidate information on specific topics from data collected on the 1982 Census of Manufactures report forms. Other reports, such as Water Use in Manufacturing and Fuels and Electric Energy Consumed, present data collected in individual surveys conducted separately from the 1982 census. Separate reports have been issued for each of the 82 groups of related industries and for each of the 50 States and the District of Columbia.

The introduction to the General Summary, Part 1, will discuss, at greater length, many of the subjects described in this introduction. For example, the text will discuss the relationship of value added by manufacture to National income by industry of origin, the changes in statistical concepts over the history of the censuses, and the valuation problems arising from intracompany transfers between manufacturing plants of a company and between manufacturing plants and sales offices and sales branches of a company.

### Scope of Census and Definition of Manufacturing Industries

The 1982 Census of Manufactures covers all establishments employing one person or more primarily engaged in manufacturing as defined in the 1972 Standard Industrial Classification (SIC) Manual and its 1977 Supplement.<sup>1</sup> This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Office of Management and Budget. This system of classification is in general use among government agencies as well as organizations outside the government.

The SIC manual defines manufacturing as the mechanical or chemical transformation of inorganic or organic substances into new products. The assembly of component parts of products is also considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills that characteristically use power-driven machines and materials handling equipment.

Manufacturing production is usually carried on for the wholesale market, for transfers to other plants of the same company, or to the order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to household consumers through the mail, through house-to-house routes, or through salespersons. Some activities of a service nature (enameling, engraving, etc.) are included in manufacturing when they are performed primarily for the trade. They are considered nonmanufacturing when they are performed primarily to the order of the household consumer.

### Relationship Between Annual Survey of Manufactures and Census of Manufactures

The Bureau of the Census conducts the annual survey of manufactures (ASM) in each of the 4 years between the censuses of manufactures. The ASM is based on a scientifically selected sample of approximately 55,000 establishments and collects the same industry statistics (employment, payroll, value of shipments, etc.) as the census of manufactures. In addition to collecting the information normally requested on the census form, the establishments in the ASM sample are requested to supply detailed information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, and costs of purchased services.

### Establishment Basis of Reporting

The census of manufactures and the annual survey of manufactures are conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1982, as in earlier years, a minimum size limit was set for including establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

This report includes information for separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company (see Auxiliaries).

### Manufacturing Universe and Census Report Forms

The 1982 Census of Manufactures universe includes approximately 345,000 establishments. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures. The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in this publication are described below.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-00500176-0.



## 1. Small Single-Unit Companies Not Sent a Report Form

In the 1982 Census of Manufactures, approximately 140,000 small single-establishment companies were excused from filing reports. Selection of these small establishments was done on an industry-by-industry basis and was based on annual payroll and total shipments data as well as on the industry classification codes contained in the administrative records of other Federal agencies. The cutoffs were selected so that these administrative records cases would account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed report forms.

Information on the physical location of the establishment, as well as information on payrolls, receipts (shipments), and industry classification, was obtained from the administrative records of other Federal agencies under special arrangements, which safeguarded their confidentiality. Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these establishments but were included in the product and material "not specified by kind" (n.s.k.) categories.

The industry classification codes included in the administrative records files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to the four-digit SIC level. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes these administrative record cases were given only a two- or three-digit SIC group. For the 1982 Census of Manufactures, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the four-digit SIC level. Establishments that did not return the classification form were coded later to those four-digit SIC industries identified as "not elsewhere classified" (n.e.c.) within the given two- or three-digit industry groups.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassifications have no significant effect on the statistics other than on the number of establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

## 2. Establishments Sent a Report Form

The 205,000 establishments covered in the mail canvass were divided into three groups:

a. **ASM sample establishments**—This group consisted of approximately 55,000 establishments covering all the units of large manufacturing establishments as well as

a sample of the medium and smaller establishments. The probability of selection was proportionate to size (see appendix, Annual Survey of Manufactures).

In a census of manufactures year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, and costs of purchased services.

The census part of the report form is one of approximately 200 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the approximately 450 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries, as well as secondary products and miscellaneous services that establishments classified in these industries were likely to be performing. Respondents were requested to identify the products, the value of each product, and, in a large number of cases, the quantity of the product shipped during the survey year. Space was also provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry, which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

Finally, a wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. **Large and medium establishments (non-ASM)**—Approximately 100,000 establishments were included in this group. A variable cutoff, based on administrative records payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive one of the approximately 200 census of manufactures regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. **Small single-unit establishments (non-ASM)**—This group consisted of approximately 50,000 establishments. For those industries where application of the variable cutoff for administrative records cases resulted in a large number of small establishments



being included in the mail canvass, an abbreviated or "short" form was used. These establishments received one of the approximately 80 versions of the short form, which requested summary product and material data and totals but no details on employment, payrolls, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics; the same data were collected on the short as well as the long form. However, detailed information on materials consumed was not collected on the short form; thus its use would increase the values of the n.s.k. categories.

## Auxiliaries

Auxiliaries are establishments whose employees are primarily engaged in performing supporting services for other establishments of the same company, rather than for the general public or for other business firms. They can be at different locations from the establishments served or at the same location as one of those establishments but not operating as an integral part thereof and serving two or more establishments. Where auxiliary operations are conducted at the same location as the manufacturing operation and operate as an integral part thereof, they usually are included in the report for the operating manufacturing establishment.

Included in the broad category of auxiliaries are administrative offices. Employees in administrative offices are concerned with the general management of multiestablishment companies, i.e., with the general supervision and control of two units or more, such as manufacturing plants, mines, sales branches, or stores. The functions of these employees may include (1) program planning, including sales research and coordination of purchasing, production, and distribution; (2) company purchasing, including general contracts and purchasing methods; (3) company financial policy and accounting, tax accounting, company sales and profit reports, and personnel accounting; (4) general engineering, including design of product machinery and equipment, and direction of engineering effort conducted at the individual operation locations; (5) direction of company personnel matters; and (6) legal and patent matters.

Other types of auxiliaries serving the plants or central management of the company include purchasing offices, sales promotion offices, research and development organizations, etc.

## Industry Classification of Establishments

Each of the establishments covered in the census was classified in one of approximately 450 manufacturing industries in accordance with the industry definitions in the SIC system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a closely related group of products. The product groupings from which industry classifications are derived are based on considerations such as similarity of manufacturing processes, types of materials used, types of customers, and the like. The resulting group of plants must be significant in terms of its number, value added by manufacture, value of shipments, and number of employees. The system operates in such a way that the definitions progressively became narrower with successive additions of numerical digits. There are 20 major groups (two-digit SIC),

143 industry groups (three-digit SIC), and approximately 450 industries (four-digit SIC). The product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are about 1,500 classes of products, identified by a five-digit code, and about 11,000 products, identified by a seven-digit code. The seven-digit products are considered the primary products of the industry with the same four digits.

Accordingly, an establishment is usually classified in a particular industry on the basis of its major activity during a particular year, i.e., production of the products primary to that industry exceeds, in value, production of the products primary to any other single industry. In a few instances, however, the industry classification of an establishment is not only determined by the products it makes but also by the process employed in making those products. For example, establishments engaged in blast furnace operations, refining of nonferrous metals from ore, or rolling and drawing of nonferrous metals (processes which involve heavy capitalization in specialized equipment) would be classified according to the process used during a census year. These establishments then would be "frozen" in that industry during the following ASM years.

In either a census or ASM year, establishments included in the ASM sample with certainty weight, other than those involved with heavily capitalized activities described above, are reclassified by industry only if the change in the primary activity from the prior year is significant or the change has occurred for two successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year (see appendix, Annual Survey of Manufactures). However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The result of these rules covering the switching of plants from one industry classification to another is that, at the aggregate level, some industries comprise different mixes of establishments between survey years, and establishment data for such industry statistics as employment and payroll may be tabulated in different industries between survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the four-digit SIC level, should be viewed with caution. This is true particularly for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, all establishments of an industry rarely specialize to this extent. The industry statistics (employment, inventories, value added by manufacture, total value of shipments including resales and miscellaneous receipts, etc.), therefore, reflect not only the primary activities of the establishments in that industry but also their secondary activities.



## CENSUS DISCLOSURE RULES

In accordance with Federal law governing census reports, no data are published that would disclose the data for an individual establishment or company.

## MICROFICHE AND COMPUTER TAPES

All the data in this report are available on microfiche. Selected data are also available on computer tape.

In addition to selected published data being on computer tape, one major data series, the location of manufacturing plants, will be available only on computer tape. This series presents the number of establishments by employment size class by four-digit SIC industry codes for States, counties, and places of 2,500 inhabitants or more. These data are available for both State and county by industry, and State and place by industry.

Microfiche reports are sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Computer tapes are sold by the Data User Services Division, Customer Services (Tapes), Bureau of the Census, Washington, D.C. 20233.

## SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Manufactures may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same

rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Industry Division, Bureau of the Census, Washington, D.C. 20233.

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review
- (X) Not applicable.
- (Z) Less than half the unit shown.
- n.e.c. Not elsewhere classified.
- n.s.k. Not specified by kind.
- SIC Standard Industrial Classification.



# EXPLANATORY TEXT

## GENERAL

This report provides ratios on the share of industrial activity accounted for by the largest companies, both for the United States as a whole and for each of approximately 450 manufacturing industries.

The first presentation of concentration ratios in manufacturing by the Bureau of the Census was made in 1939 and was based on the 1935 Census of Manufactures. Ratios for all manufacturing industries were presented in the National Resources Committee publication, *The Structure of the American Economy*. In the 1937 Census, concentration ratios were presented for a large sample of individual products. Beginning in 1947, with the first full census following World War II, concentration ratios have been presented as a part of every census of manufactures. In 1954, 1958, and 1963, the Bureau conducted the project in cooperation with the Senate Subcommittee on Antitrust and Monopoly. The Census Bureau has continued to present this widely-used report in the censuses of 1967, 1972, 1977, and 1982 for the benefit of data users in the industrial, educational, and governmental communities.

As in previous reports, no attempt is made to interpret the significance of the concentration ratios. The ratios are not used as the basis for an analysis of either the causes or effects of concentration. The report consists merely of a presentation of the ratios themselves.

Through years of usage, the term "concentration ratio" has come to mean the share of the total activity or resources of a given segment of the economy accounted for by its largest companies. In order to avoid disclosure of the operations of any individual firms, concentration ratios based on census data are presented in groups of four companies or more, that is, the four largest, the eight largest, and so forth.

## CONCENTRATION RATIOS AND THE ESTABLISHMENT BASIS OF REPORTING

The concentration ratios based on census of manufactures data have consistently been prepared from establishment reports. Under the establishment system, the shipments of a given company are distributed among all of the industries in which it has establishments. In tables 1 through 4 in this report, which reflect the activity of the largest companies in the industrial sector as a whole, the establishment approach means that only the manufacturing establishments of these companies are taken into account in determining their size. In table 5, a company is defined as the total of the individual establishments under one ownership within an industry. Consequently, the same company may appear in several industries, if it has diversified activities.

## MANUFACTURES—SUBJECT SERIES

## CONCENTRATION RATIOS AND THE SIC SYSTEM

In essence, the SIC system seeks to establish spheres of economic activity which are unique and distinguishable because of a composite of similar characteristics which they have in common. These characteristics include: similarity of products in terms of their uses, and the bringing together of plants which specialize in making these products and account for a significant proportion of their total shipments. They also include similarity of processes, similarity of materials used, and the bringing together of a group of plants which are economically significant in terms of their number, value added by manufacture, value of shipments, and number of employees. The standards flow very largely from the actual structure into which American businesses have grouped themselves, and it is these characteristics that make it the best single system for the largest number of uses. In the majority of instances, an industry is comprised of producers of similar goods or services. Usually, the products are made of similar materials and by similar processes and the producers compete with one another.

For the purpose of measuring concentration, the fact that the classification system is not based exclusively on the usage of the product is somewhat of a limitation, since in the economic concept of the market, it is immaterial whether products which are substitutable for each other are produced by the same processes or made from the same materials. In some cases, the industry and product definitions are too broad; that is, there are included in the same category products which do not serve the same function and are, thus, not substitutable for each other. In other cases, they are too narrow; that is, a single category fails to include products which are substitutable—for example, metal and glass containers. Another limitation is the fact that the classification's industries and products are regularly being redefined. The need for redefinition arises particularly from the introduction of new products, the declining importance of older products, the introduction of new technologies, the growth of small fields into important industries, and similar dynamic developments. While necessary to keep the classification abreast of the changing nature of the economy, an inevitable cost of redefinition is the loss of comparability for many categories over time.

## LIMITATIONS IN USE OF CONCENTRATION RATIOS

Like all bodies of statistical data, the concentration ratios must be used with an awareness of both their attributes and limitations. The preceding discussion has described, in some detail, the nature of the data and the classification system used to aggregate the data. There are also other considerations which must be kept in mind as the late Senator Estes Kefauver discussed in his letter to the Honorable James O. Eastland, Chairman of



the Senate Committee on Judiciary, transmitting the 1958 report. The following is a quotation from that letter:<sup>1</sup>

"At this point, it may be useful to discuss the principal sources of understatement and overstatement of the concentration ratios.

"From the point of view of the economic concept of the market, there are several sources of possible understatement of the concentration ratios. The identification of which plants are controlled by which companies is based on census reports and available public records. As part of each census, the known large companies are sent a questionnaire requiring them to list the plants which they operate directly or through their subsidiaries and affiliates. For census purposes the company consists of those establishments which it owns or admits control over and which have been classified as chiefly manufacturing. Obviously, any instances in which there exists control not reported to the Census Bureau results in an understatement of the concentration ratios.

"A second source of understatement stems from the fact that the concentration ratios presented herein relate to the Nation as a whole. Where the market area is limited by the perishability of the product, by relatively high transportation costs or other factors, concentration in the individual geographic markets may be considerably higher than is shown by national concentration ratios. Thus, for the Nation as a whole, the share of the value of shipments of the bread and related products industry accounted for in 1954 by the four largest companies was 20 percent. Yet, a special tabulation based on the same data showed that in only three individual States was the share of the value of shipments of the 4 largest companies in that State less than 30 percent, while in 23 States the figure was over 50 percent, and in the actual individual market areas represented by cities, the level of concentration tended to be even higher.<sup>2</sup>

"A third source of understatement arises from the defining of many of the industries and some of the product classes in terms so broad as to include nonsubstitutable products. The extent to which the industry and product definitions conform to the actual character of the market differs considerably from industry to industry and product to product. On the one hand is a four digit industry, cigarettes, which would appear to be an adequate representation of the market. At the other extreme is steel works and rolling mills, also a four-digit industry, which produces many individual products. With few exceptions, these products are generally not substitutable for each other. There is no market for steel, as such; there are individual product markets for structural shapes, tinplate, rails, etc. Although in some cases the more expensive forms of cold-rolled sheet and strip can be substituted for cheaper hot-rolled products, this occurs only when the buyer is forced to do so during periods of tight supply. Since the level of concentration usually tends to rise as the definition is narrowed, it follows that in such cases the concentration ratio for the industry may significantly understate the concentration in the individual product markets. In 1954 the concentration ratio for steelworks and rolling mills was 54 percent.

Yet, according to a separate study, for all but 6 of the industry's 39 individual products, the 4 largest companies in 1957 accounted for over 60 percent of the production, while the average concentration ratio of the 39 products was 69 percent.<sup>3</sup> There is, however, a limit on the extent to which concentration in the market can be approached by progressively narrowing the definitions of industries and products. This is the limit imposed by product substitutability.

"Where the definition of the industry or the product is so narrow as to exclude substitutable products, the concentration ratio will overstate the concentration in the market. Thus, because metal cans are classified in one industry and glass containers in another, the concentration ratios for each will overstate the concentration in those markets for which metal cans and glass containers are in fact substitutable.

"What makes one product substitutable for another depends not only on physical characteristics but also on the critical matter of price. Thus, it could be said that for some uses, platinum is substitutable for steel, but the difference in price is so vast that they are not in fact economically substitutable. Because the question of what makes one product substitutable for another depends on price, changes in buyers' tastes, and other highly variable factors, substantially varies over time and it is impossible to set forth any mechanical means of arbitrarily determining degrees of substitutability.

"A second source of overstatement in the domestic markets is the exclusion of imports. While imports into the United States of manufactured goods taken as a whole are relatively small, amounting in 1958 to only \$8 billion, or less than 5 percent of the \$141 billion of value added by manufacture of all domestic American establishments, they are important for a number of individual industries. Thus, considerable proportions of the total sales in the United States of such products as sewing machines and typewriters consist of imports. In such cases, the concentration ratios applicable to domestic manufacturing will tend to overstate the concentration in the market. The overstatement would be reduced, however, to the extent that the imports were produced in overseas factories of the largest domestic companies.

"While these limitations must be borne in mind in any use of the concentration ratios, their importance should not be overstressed. For one thing, the limitations will generally tend to have less effect on the use of the ratios to show changes in concentration over time than in depicting the level of concentration in the market at a given point of time. This is because the factors making for under- or over-statement are usually present both at the beginning and the end of the time span for which the change is measured. The use of the ratios to show change in concentration is, thus, affected only where the factors making for under- or over-statement are relatively more important in one year than in another. Moreover, many of the product classes and a not inconsiderable number of the industries do represent reasonably adequate representations of concentration in that market. And, where this is not so, they provide, at the very least, a starting point to which appropriate adjustments to allow for the various sources of under- and over-statement can be made."

<sup>1</sup>87th Congress, 2nd Session. Report of Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, "Concentration Ratios in Manufacturing Industry, 1958," Part I, page IV.

<sup>2</sup>S. Rept. 1923, 86th Cong., 2d session (1960), "Administered Prices: Bread"; report of the Senate Subcommittee on Antitrust and Monopoly, pp. 120-125.

<sup>3</sup>S. Rept. 1387 -85th Cong., 2d sess. (1958), "Administered Prices: Steel"; report of the Senate Subcommittee on Antitrust and Monopoly, pp. 69.



## EXPLANATION FOR TABLES 1 to 4

These four tables reflect the activity of the largest companies in the industrial sector as a whole. A "company" is defined, for this purpose, as the total of its industrial establishments, including not only its manufacturing plants but also auxiliary establishments such as warehouses and central administrative offices.

Concentration at this level is measured in terms of value added by manufacture. In these census tabulations, value added is preferable to sales or shipments in measuring total company size, since an aggregation of shipments from the census establishment records would contain duplication owing to intracompany transfers of products. Value added for all manufacturing establishments of a given company was aggregated irrespective of the industry classification of the individual establishments. The companies were then arrayed by magnitude of value added in each specified year and totals computed for the 50, 100, and 200 largest companies.

The formula for calculating value added by manufacture for the censuses 1982 through 1958 differs from the one used for the 1954 census and earlier years. During the earlier period, the value added of an establishment was calculated by subtracting the cost of materials, supplies, containers, fuels, purchased electric energy, and contract work from the value of shipments for products manufactured plus miscellaneous receipts for services rendered. This is known as unadjusted value added in census publications. Beginning with 1958, the measure of value added has been adjusted for each establishment in two respects. Value added now includes: (1) Value added by merchandising (that is, the difference between the sales value and cost of merchandise sold without further manufacture, processing, or assembly); and (2) an adjustment for the net change in finished goods and work-in-process inventories between the beginning and the end of the year. The resulting figure is the adjusted value added. Furthermore, for 1982, the value added by manufacture is not strictly comparable to prior censuses data because of a change in instruction for reporting inventories. Effective with the 1982 Economic Censuses, uniform instructions for reporting inventories were introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using generally accepted accounting methods (FIFO, LIFO, market, etc.). In 1982, LIFO users were asked to report first the inventory values prior to the LIFO adjustment and, secondly, to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Thus, the rankings of the 200 largest companies in 1947 and 1954 were based on unadjusted value added; those for later years were based on adjusted value added. The use of these different measures for determining size should have little effect on the ranking and relative shares of individual companies or on the aggregate shares of the 50, 100, 150, or 200 largest companies in each year.

Except for tables 2 and 3, companies were classified in size groups in each particular year based on their size in that year. Thus, a size group (such as the top four) does not necessarily include the same companies from year to year. The extent to which large companies have grown or declined over the years is reflected in tables 2 and 3. Table 3 shows, for example, that of the companies which constituted the 50 largest in 1982, only 22 were among the 50 largest in the 1954 census.

## EXPLANATION FOR TABLE 5

This table is based on the establishment approach described in the Introduction. A "company" is defined as the total of the individual establishments under one ownership within an industry. Consequently, the same company may appear in several industries if it has diversified activities. In addition, the following points should be kept in mind:

- (1) The top 4, 8, 20, and 50 companies are the largest for any particular year based on their value of shipments in that year and are, therefore, not necessarily the same companies from year to year.
- (2) For a few industries, as indicated by footnotes, value added by manufacture rather than value of shipments has been used to determine the size of companies. This is considered necessary for industries in which the aggregate value of shipments contains a large amount of duplication because of shipments of semifinished products between establishments. An example is SIC 3312, Blast Furnaces (Including Coke Ovens), Steel Works, and Rolling Mills, in which there are extensive intra-industry sales and transfers of coke oven and blast furnace products to finishing plants. (The historical changes in the method for calculating value added by manufacture are described in the discussion of tables 1 through 4.)
- (3) Ratios are shown for years prior to 1972 only if the SIC industry definitions were considered comparable. There were extensive revisions in the SIC in 1972 which, in table 5, result in suppression of data for earlier years for a substantial number of industries. In general, the criteria used for judging the comparability of definitions was the effect of the change on number of employees in the industry under the old and new definitions. If the new definition caused more than a 2-percent change, the historical data were suppressed.
- (4) The 1966, 1970, and 1976 concentration ratios are based on data developed in the Annual Survey of Manufactures. Since the industry aggregates which provide the denominators in the concentration ratios are based on a sample, they are subject to sampling errors. Sampling errors for each industry, as well as a more complete description of the Annual Survey of Manufactures sample are shown in the appendix.

## EXPLANATION FOR TABLES 6 and 7

The product classes (five-digit) and product groups (four-digit) shown in these tables are those developed by the Census Bureau within the framework of the Standard Industrial Classification. In general, the first four digits of the product code numbers refer to the SIC industry in which the product is primarily made. For example, in the product class number 20232, Canned Milk products, the first four digits (2023) identify the Condensed and Evaporated Milk industry. The four-digit code numbers shown in these tables (followed by a hyphen) identify product groups rather than industries. The number 2023 identifies the total shipments of condensed and evaporated milk products, whether made in industry 2023 or in other industries. Complications occur in the few SIC industries defined in terms of processes or



equipment used, as well as products made. As an example, processed pork as a product of slaughtering plants is coded 20116, but if made in meat processing plants, is coded 20136. Since these products are similar despite the SIC distinction, data for them have been brought together in this publication in table 7.

Within each product class or group shown in tables 6 and 7, a "company" is represented by the sum of the shipments of that product by all of its manufacturing plants. Consequently, the same company often appears in several different product classes or groups.

As discussed in the section on Census Report Forms, establishments with fewer than 10 employees were excused from filing census reports. Limited data on payrolls, sales, and industry classification were made available to the Census Bureau from administrative records of the Social Security Administration and the Internal Revenue Service. For total manufacturing, these establishments account for less than 3 percent of the payrolls and value added, but this proportion is somewhat larger for industries characterized by small establishments such as lumber, printing, and apparel. The effect of using administrative records for these establishments generally increases the proportional size of the "not specified by kind" (n.s.k.) product classes, because their shipments could not be assigned to specific five-digit product classes. Also included in this n.s.k. category are those establishments with 10 employees or more which, for various reasons, did not report the product class detail.

Concentration ratios are not shown for the n.s.k. product classes since they would be of little or no significance. However, if there is a significant increase in the value of shipments of an n.s.k. product class, the establishments comprising the n.s.k. are analyzed and some or all of their value of shipments prorated to the specific five-digit classes affected. Their concentration ratios are then recalculated.

## HERFINDAHL-HIRSCHMAN INDEX

The Herfindahl-Hirschman Index is shown for the first time in this publication series and is computed for 1982 only. The concept of the index shown in this publication was developed by Albert O. Hirschman in 1945 in his book, "National Power and Structure of Foreign Trade." A similar index was developed by Orris C. Herfindahl in his unpublished Ph.D. dissertation, "Concentration in the Steel Industry," at Columbia University in 1950.

The Herfindahl-Hirschman Index is a truncated index in that it is the square of the individual company ratios summed across the largest 50 companies or the complete universe, whichever is lower. It is calculated by squaring the concentration ratio for each company and summing those squares to a cumulative total. The cumulative total (sum of the squares) is the Herfindahl-Hirschman Index. This index is shown in table 5 at the four-digit industry level and in table 6 at the four-digit product group and five-digit product class levels.

Application of the index is relatively straightforward. The higher the index, the more concentrated the industry or product class is at the top. For example, the concentration ratio for the largest 50 companies is 100 percent. From the concentration ratio, it is impossible to determine the amount accounted for by the top ranked companies. The Herfindahl-Hirschman Index would provide an insight to this determination. If each of the largest 50 companies accounted for two percentage points of the 100 percent. It would produce an index of 200. However, if the top ranked company accounted for 50 percentage points and the remaining 49 companies slightly over one percentage point each, the resulting index would be 2550.

**Data in this publication may differ slightly from the industry and area reports previously published. These differences are due to corrections which were made for minor errors identified after the industry and area reports were issued. The report reflects these corrections.**

# Concentration Ratios in Manufacturing

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**Table 1. Share of Value Added by Manufacture Accounted for by the 50, 100, 150, and 200 Largest Manufacturing Companies: 1982 and Earlier Years**

[Percent. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Company and rank group	1982	1977	1976	1972	1970	1967	1966	1963	1962	1958	1954	1947
50 largest.....	24	24	24	25	24	25	25	25	24	23	23	17
100 largest.....	33	33	33	33	33	33	33	33	32	30	30	23
150 largest.....	39	39	39	39	38	38	38	37	36	35	34	27
200 largest.....	43	44	44	43	43	42	42	41	40	38	37	30

Note: 1962, 1966, 1970, and 1976 data are based on the annual survey of manufactures. "Largest companies" are those which were the largest in each of the specified years.

<sup>1</sup>As a result of rounding these percentages to whole numbers, the 1977 and 1976 largest 50 companies ratios show a significant decrease from 1972 levels. The decrease is actually much smaller; see table 4 for unrounded percentages for 1972. The 1976 unrounded figures are available in the 1976 Annual Survey of Manufactures publication, "Concentration Ratios in Manufacturing: 200 Largest Companies."

**Table 2. Share of Value Added by Manufacture Accounted for by the 50 and 100 Largest Identical Manufacturing Companies as Ranked in Each Year: 1982 and Earlier Years**

[Percent. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year of company ranking and company rank group	1982	1977	1972	1970	1967	1966	1963	1962	1958	1954	1947
<b>1982</b>											
50 largest.....	24	23	23	22	21	22	21	20	19	18	12
100 largest.....	33	31	30	30	27	27	27	26	24	23	15
<b>1977</b>											
50 largest.....	22	24	24	23	23	24	23	22	21	20	14
100 largest.....	31	33	32	31	30	30	29	28	26	25	18
<b>1972</b>											
50 largest.....	21	24	25	23	23	23	22	22	20	19	12
100 largest.....	30	33	33	31	30	30	29	28	26	25	17
<b>1970</b>											
50 largest.....	21	23	23	24	23	24	23	22	20	19	12
100 largest.....	30	33	32	33	31	31	29	29	26	25	18
<b>1967</b>											
50 largest.....	20	23	22	24	25	25	24	24	22	21	15
100 largest.....	29	31	30	32	33	33	32	31	29	28	20
<b>1966</b>											
50 largest.....	21	23	22	23	24	25	24	24	22	21	14
100 largest.....	29	31	30	31	32	33	32	31	29	28	21
<b>1963</b>											
50 largest.....	19	22	21	23	24	24	25	24	23	22	15
100 largest.....	28	30	29	31	32	33	33	32	30	29	21
<b>1962</b>											
50 largest.....	20	23	22	23	24	25	25	24	23	22	15
100 largest.....	28	30	29	31	33	33	32	32	30	29	21
<b>1958</b>											
50 largest.....	19	22	20	22	23	24	24	24	23	23	16
100 largest.....	26	29	27	29	31	31	32	31	30	29	22
<b>1954</b>											
50 largest.....	17	21	20	21	23	23	24	23	23	23	16
100 largest.....	26	28	27	28	31	31	31	30	30	30	21
<b>1947</b>											
50 largest.....	15	19	17	19	20	21	21	21	20	21	17
100 largest.....	21	25	24	26	27	27	28	27	27	27	23

See footnotes at end of table.

**Table 2. Share of Value Added by Manufacture Accounted for by the 50 and 100 Largest Identical Manufacturing Companies as Ranked in Each Year: 1982 and Earlier Years**  
—Con.

Note: The 100 largest companies in each specified year were selected and their proportion of total value added by manufacture in each of the other years was computed. Thus, this table measures the changes in concentration ratios for a fixed group of companies from one year to another. In case of mergers, the larger of the two at the time of merger was considered to be the predecessor company.

**Table 3. 50 Largest Companies of Each Census Year Distributed by Rank in Other Years: 1982 and Earlier Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year and that year's ranking of 50 leading companies in other years	Number of companies										
	1982	1977	1972	1970	1967	1966	1963	1962	1958	1954	1947
<b>1982</b>											
Among 50 largest .....	50	37	32	30	30	30	28	28	25	22	18
Among 51st to 100th largest .....	-	9	13	14	11	11	11	8	11	13	6
Among 101st to 200th largest .....	-	4	5	6	3	2	3	5	5	4	14
Not among 200 largest .....	-	-	-	-	6	7	8	9	9	11	12
<b>1977</b>											
Among 50 largest .....	37	50	43	41	39	38	34	36	32	30	23
Among 51st to 100th largest .....	8	-	7	9	9	8	9	7	8	12	10
Among 101st to 200th largest .....	5	-	-	-	1	2	4	4	6	1	10
Not among 200 largest .....	-	-	-	-	-	1	2	3	3	4	7
<b>1972</b>											
Among 50 largest .....	32	43	50	45	42	43	40	40	37	33	25
Among 51st to 100th largest .....	11	7	-	5	8	5	6	6	6	11	10
Among 101st to 200th largest .....	7	-	-	-	-	2	3	3	4	1	10
Not among 200 largest .....	-	-	-	-	-	-	1	1	3	5	5
<b>1970</b>											
Among 50 largest .....	30	41	45	50	45	44	41	41	36	33	25
Among 51st to 100th largest .....	12	7	4	-	5	5	6	6	5	10	10
Among 101st to 200th largest .....	7	1	1	-	-	1	3	3	7	3	9
Not among 200 largest .....	1	1	-	-	-	-	-	-	2	4	6
<b>1967</b>											
Among 50 largest .....	30	38	42	45	50	46	43	41	35	32	24
Among 51st to 100th largest .....	10	9	7	5	-	3	6	8	8	12	10
Among 101st to 200th largest .....	7	2	1	-	-	1	1	1	6	4	12
Not among 200 largest .....	3	1	-	-	-	-	-	-	1	2	4
<b>1966</b>											
Among 50 largest .....	31	39	43	45	46	50	42	43	36	33	25
Among 51st to 100th largest .....	9	8	4	4	3	-	8	6	9	12	10
Among 101st to 200th largest .....	8	1	1	-	-	-	-	1	4	3	12
Not among 200 largest .....	2	2	2	1	1	-	-	-	1	2	3
<b>1963</b>											
Among 50 largest .....	28	35	40	41	43	42	50	46	42	38	30
Among 51st to 100th largest .....	10	12	9	8	7	8	-	4	6	10	10
Among 101st to 200th largest .....	9	2	-	-	-	-	-	-	2	2	-
Not among 200 largest .....	3	1	1	1	-	-	-	-	-	-	-
<b>1962</b>											
Among 50 largest .....	29	37	40	41	41	43	46	50	42	38	29
Among 51st to 100th largest .....	10	9	9	8	9	7	4	-	7	11	10
Among 101st to 200th largest .....	9	3	-	-	-	-	-	-	1	1	10
Not among 200 largest .....	2	1	1	1	-	-	-	-	-	-	1
<b>1958</b>											
Among 50 largest .....	25	33	36	36	35	36	42	42	50	45	34
Among 51st to 100th largest .....	11	11	10	10	14	14	8	8	-	-	5
Among 101st to 200th largest .....	10	4	2	3	1	-	-	-	-	-	6
Not among 200 largest .....	4	2	2	1	-	-	-	-	-	-	-

**Table 3. 50 Largest Companies of Each Census Year Distributed by Rank in Other Years: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year and that year's ranking of 50 leading companies in other years	Number of companies										
	1982	1977	1972	1970	1967	1966	1963	1962	1958	1954	1947
<b>1954</b>											
Among 50 largest .....	22	31	33	33	32	33	38	38	45	50	35
Among 51st to 100th largest .....	11	11	9	11	16	16	11	11	4	-	11
Among 101st to 200th largest .....	10	5	5	4	1	-	1	1	1	-	3
Not among 200 largest .....	9	3	3	2	1	1	-	-	-	-	1
<b>1947</b>											
Among 50 largest .....	18	24	25	24	24	25	30	29	34	35	50
Among 51st to 100th largest .....	9	13	13	13	17	18	16	16	12	12	-
Among 101st to 200th largest .....	13	5	6	8	5	4	3	5	4	3	-
Not among 200 largest .....	10	8	6	5	4	3	1	-	-	-	-

Note: 1962, 1966, and 1970 data are based on the annual survey of manufactures; other years on the census of manufactures. The 50 largest companies in each specified year were selected and the rank group of the same companies determined in other years. Thus, this table measures the shifting of position of a fixed group of companies from one year to another. In case of mergers, the larger of the two at the time of the merger was considered to be the predecessor company with the smaller treated as having ceased operations and gone out of business. In divestitures, the largest surviving firm was considered to be the successor with the smaller components treated as new firms.

**Table 4. Share of Value Added, Employment, Payroll, Value of Shipments, and New Capital Expenditures Accounted for by the 200 Largest Companies: 1982 and Earlier Census Years**

[Percent. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year of company ranking and company rank group based on value added by manufacture	Value added by manufacture	All employees		Total payroll		Production workers			Value of shipments <sup>3</sup>	New capital expenditures
		With auxiliaries <sup>1</sup>	Without auxiliaries <sup>2</sup>	With auxiliaries <sup>1</sup>	Without auxiliaries <sup>2</sup>	Number	Hours	Wages		
50 largest .....	1982..	23.9	17.1	15.9	23.5	22.0	14.3	14.3	20.5	26.6
	1977..	24.4	17.9	17.1	24.8	23.7	16.2	16.8	23.6	28.0
	1972..	24.5	19.4	18.3	25.1	24.0	17.5	17.9	23.6	25.8
	1967..	24.6	20.2	(NA)	25.2	(NA)	17.8	17.9	22.5	27.4
51st to 100th largest .....	1982..	8.9	6.7	6.4	8.0	7.6	6.2	6.2	7.6	9.6
	1977..	9.0	7.1	6.7	8.1	7.6	6.7	6.8	7.8	10.5
	1972..	8.6	6.4	6.1	7.3	6.9	5.9	6.1	6.9	9.3
	1967..	8.2	6.2	(NA)	7.2	(NA)	5.7	5.7	6.7	13.3
101st to 150th largest .....	1982..	5.9	5.1	4.8	5.6	5.2	4.5	4.5	5.1	6.8
	1977..	6.1	4.8	4.6	5.3	5.1	4.6	4.7	5.3	5.8
	1972..	5.7	5.3	5.1	5.5	5.3	5.2	5.3	5.6	6.1
	1967..	5.1	4.3	(NA)	4.6	(NA)	4.0	4.1	4.4	6.0
151st to 200th largest .....	1982..	4.5	3.8	3.5	4.4	4.0	3.5	3.5	4.2	5.7
	1977..	4.3	3.7	3.5	4.0	3.7	3.4	3.5	3.8	4.9
	1972..	3.8	3.1	(NA)	3.4	(NA)	2.9	2.9	3.2	4.4
	1967..	3.8	3.1	(NA)	3.4	(NA)	2.9	2.9	3.2	4.4
200 largest .....	1982..	43.2	32.7	30.7	41.5	38.8	28.4	28.5	37.3	48.7
	1977..	43.7	33.4	31.9	42.1	40.0	31.0	31.8	40.4	49.2
	1972..	43.1	34.6	32.7	41.8	39.8	31.7	32.5	39.6	45.8
	1967..	41.6	33.7	(NA)	40.3	(NA)	30.4	30.7	36.8	51.5

Note: All percentages are independently rounded and do not necessarily add to totals.

<sup>1</sup>Includes employees in auxiliaries serving manufacturing establishments.

<sup>2</sup>Excludes employees in auxiliaries serving manufacturing establishments and, thus, represents operating manufacturing establishments.

<sup>3</sup>Includes a substantial, but unmeasurable amount of duplication because of shipments of materials and products among manufacturing establishments for further processing.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)		
			Total (million dollars)	Percent accounted for by <sup>4</sup> —									
				4 largest companies	8 largest companies	20 largest companies	50 largest companies						
20	FOOD AND KINDRED PRODUCTS												
2011	Meat packing plants <sup>9</sup> -----	1982..	1 658	<sup>105</sup> 824.6	29	43	61	75	325	98	85	(X)	
		1977..	2 404	<sup>104</sup> 010.1	19	37	49	62	(NA)	98	84	(X)	
		1972..	2 291	<sup>102</sup> 968.1	22	37	51	66	(NA)	98	84	(X)	
		1970..	(NA)	<sup>102</sup> 630.1	23	37	(NA)	(NA)	(NA)	(NA)	(NA)	1	
		1967..	2 529	<sup>102</sup> 220.5	26	38	50	62	(NA)	98	85	(X)	
		1966..	(NA)	<sup>102</sup> 025.5	27	39	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1963..	2 833	<sup>101</sup> 908.3	31	42	54	64	(NA)	98	86	(X)	
		1958..	2 646	<sup>101</sup> 677.1	34	46	57	65	(NA)	98	88	(X)	
		1954..	2 228	<sup>101</sup> 394.5	39	51	60	(NA)	(NA)	98	87	(X)	
		1947..	1 999	<sup>109</sup> 77.1	41	54	63	(NA)	(NA)	(NA)	(NA)	(X)	
		1966..	(NA)	<sup>102</sup> 025.5	27	39	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1963..	2 833	<sup>101</sup> 908.3	31	42	54	64	(NA)	98	86	(X)	
		1958..	2 646	<sup>101</sup> 677.1	34	46	57	65	(NA)	98	88	(X)	
		1954..	2 228	<sup>101</sup> 394.5	39	51	60	(NA)	(NA)	98	87	(X)	
		1947..	1 999	<sup>109</sup> 77.1	41	54	63	(NA)	(NA)	(NA)	(NA)	(X)	
2013	Sausages and other prepared meats <sup>9</sup> -----	1982..	1 193	<sup>102</sup> 900.9	19	28	41	58	145	97	61	(X)	
		1977..	1 213	<sup>102</sup> 039.0	23	30	39	57	(NA)	97	60	(X)	
		1972..	1 207	<sup>101</sup> 099.9	19	26	38	54	(NA)	97	52	(X)	
		1970..	(NA)	<sup>109</sup> 17.0	16	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1967..	1 294	<sup>107</sup> 42.5	15	22	34	51	(NA)	96	46	(X)	
		1966..	(NA)	<sup>106</sup> 24.6	16	23	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1963..	1 273	<sup>105</sup> 63.4	16	23	35	51	(NA)	94	38	(X)	
2016	Poultry dressing plants <sup>11 12</sup> -----	1982..	231	9 044.6	22	36	60	82	242	99	90	(X)	
		1977..	313	5 746.1	16	27	48	72	(NA)	99	92	(X)	
		1972..	407	3 254.1	17	26	42	62	(NA)	97	97	(X)	
2017	Poultry and egg processing <sup>11 12</sup> -----	1982..	136	1 426.5	22	35	59	87	261	97	26	(X)	
		1977..	124	856.6	21	35	58	88	(NA)	99	28	(X)	
		1972..	110	588.1	23	36	65	91	(NA)	84	88	(X)	
2021	Creamery butter -----	1982..	61	1 686.8	41	61	92	99+	663	77	64	(X)	
		1977..	123	900.5	49	66	85	95	(NA)	80	61	(X)	
		1972..	201	808.3	45	58	78	92	(NA)	71	70	(X)	
		1970..	(NA)	806.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5	
		1967..	510	958.8	15	22	36	60	(NA)	71	75	(X)	
		1966..	(NA)	975.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	4	
		1963..	725	988.8	11	19	31	48	(NA)	69	77	(X)	
		1958..	997	947.4	11	18	28	45	(NA)	70	80	(X)	
		1954..	1 172	926.4	16	24	34	(NA)	(NA)	74	77	(X)	
		<sup>13</sup> 1947..	1 482	844.7	18	24	32	(NA)	(NA)	79	84	(X)	
2022	Cheese, natural and processed -----	1982..	575	10 762.8	34	47	62	76	463	89	92	(X)	
		1977..	660	6 126.0	35	48	62	76	(NA)	91	93	(X)	
		1972..	739	3 195.0	42	53	65	77	(NA)	89	98	(X)	
		1970..	(NA)	2 175.7	43	52	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1967..	891	1 707.8	44	51	61	72	(NA)	93	98	(X)	
		1966..	(NA)	1 552.3	44	51	(NA)	(NA)	(NA)	(NA)	(NA)	9	
		1963..	982	1 170.8	44	51	59	69	(NA)	93	96	(X)	
2023	Condensed and evaporated milk -----	1982..	132	4 730.7	35	50	74	95	463	78	68	(X)	
		1977..	167	3 188.5	30	46	71	92	(NA)	79	76	(X)	
		1972..	172	1 667.8	39	58	76	92	(NA)	80	68	(X)	
		1970..	(NA)	1 352.0	39	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1	
		1967..	179	1 263.0	41	56	74	90	(NA)	82	71	(X)	
		1966..	(NA)	1 099.5	45	59	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1963..	167	937.9	40	53	71	90	(NA)	80	66	(X)	
2024	Ice cream and frozen desserts -----	1982..	482	2 855.1	22	34	55	79	244	94	73	(X)	
		1977..	507	2 008.6	28	40	60	79	(NA)	94	75	(X)	
		1972..	561	1 244.7	29	40	58	75	(NA)	96	70	(X)	
		1970..	(NA)	1 146.2	30	41	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1967..	713	1 059.4	33	43	60	73	(NA)	97	73	(X)	
		1966..	(NA)	1 142.2	33	44	(NA)	(NA)	(NA)	(NA)	(NA)	4	
		1963..	901	1 076.5	37	48	64	74	(NA)	93	74	(X)	
		1958..	1 171	877.7	38	48	59	69	(NA)	94	71	(X)	
		1954..	1 375	727.4	36	45	57	(NA)	(NA)	93	70	(X)	
		<sup>14</sup> 1947..	1 273	611.8	40	48	57	(NA)	(NA)	90	87	(X)	
2026	Fluid milk -----	1982..	853	18 736.0	16	27	48	66	151	83	92	(X)	
		1977..	1 516	13 786.2	18	28	43	60	(NA)	88	94	(X)	
		1972..	2 025	9 395.7	18	26	42	56	(NA)	88	96	(X)	
		1970..	(NA)	8 253.3	20	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1	
		1967..	2 988	7 826.0	22	30	42	51	(NA)	90	96	(X)	
		1966..	(NA)	7 434.9	23	30	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1963..	4 030	7 025.9	23	30	40	48	(NA)	90	95	(X)	
1958..	5 008	5 802.0	23	29	37	45	(NA)	90	95	(X)			
	1954..	(NA)	4 586.8	22	28	(NA)	(NA)	(NA)	(NA)	(NA)	(X)		
	2032	Canned specialties <sup>9</sup> -----	1982..	171	<sup>154</sup> 140.8	62	77	91	98	1 532	78	90	(X)
			1977..	172	<sup>152</sup> 829.2	63	77	92	98	(NA)	80	89	(X)
1972..			178	<sup>151</sup> 876.6	67	81	94	98	(NA)	81	91	(X)	
1970..			(NA)	<sup>151</sup> 634.2	66	81	(NA)	(NA)	(NA)	(NA)	(NA)	1	
1967..			150	<sup>151</sup> 361.9	69	83	94	99	(NA)	82	91	(X)	
1966..			(NA)	<sup>151</sup> 456.9	63	79	(NA)	(NA)	(NA)	(NA)	(NA)	2	
1963..			154	<sup>151</sup> 169.3	67	83	94	99	(NA)	80	91	(X)	
2033	Canned fruits and vegetables -----	1982..	514	<sup>159</sup> 283.4	21	35	54	74	214	89	87	(X)	
		1977..	648	<sup>156</sup> 662.8	22	35	55	75	(NA)	90	89	(X)	
		1972..	765	<sup>154</sup> 043.8	20	31	53	71	(NA)	89	94	(X)	
		1970..	(NA)	<sup>153</sup> 629.1	21	33	(NA)	(NA)	(NA)	(NA)	(NA)	1	
		1967..	930	<sup>153</sup> 467.8	22	34	52	70	(NA)	90	93	(X)	
		1966..	(NA)	<sup>153</sup> 215.8	24	35	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1963..	1 135	<sup>152</sup> 742.8	24	34	50	68	(NA)	89	91	(X)	

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)				
			Total (million dollars)	Percent accounted for by <sup>4</sup> —										
				4 largest companies	8 largest companies	20 largest companies	50 largest companies							
20	FOOD AND KINDRED PRODUCTS—Con.													
2034	Dehydrated fruits, vegetables, and soups -----	1982..	119	1 745.1	42	59	84	97	600	94	93	(X)		
		1977..	143	1 142.4	37	53	77	94	(NA)	94	88	(X)		
		1972..	133	607.3	33	51	76	94	(NA)	95	88	(X)		
		1970..	(NA)	464.3	33	52	(NA)	(NA)	(NA)	(NA)	(NA)	2		
		1967..	134	420.8	32	50	75	96	(NA)	94	86	(X)		
		1966..	(NA)	395.2	31	50	(NA)	(NA)	(NA)	(NA)	(NA)	4		
		1963..	126	318.7	37	56	80	96	(NA)	96	89	(X)		
		1958..	130	267.3	45	66	82	98	(NA)	97	93	(X)		
		1954..	119	192.2	48	69	87	(NA)	(NA)	95	97	(X)		
		1947..	120	51.1	56	71	86	(NA)	(NA)	96	90	(X)		
		2035	Pickles, sauces, and salad dressings <sup>16</sup> -----	1982..	325	<sup>15</sup> 4 268.8	56	65	76	89	1 697	68	83	(X)
				1977..	380	<sup>15</sup> 2 996.5	55	62	73	86	(NA)	69	86	(X)
				1972..	429	<sup>15</sup> 1 166.7	33	46	62	81	(NA)	80	78	(X)
				1970..	(NA)	<sup>15</sup> 1 114.5	38	51	(NA)	(NA)	(NA)	(NA)	(NA)	2
1967..	479			<sup>15</sup> 8 18.9	33	44	62	80	(NA)	81	80	(X)		
1966..	(NA)			<sup>15</sup> 8 17.5	33	44	(NA)	(NA)	(NA)	(NA)	(NA)	3		
2037	Frozen fruits and vegetables <sup>17</sup> -----	1963..	541	<sup>15</sup> 6 77.3	36	46	64	79	(NA)	79	82	(X)		
		1982..	195	<sup>15</sup> 5 374.6	27	42	63	86	306	93	93	(X)		
		1977..	187	<sup>15</sup> 3 297.5	22	40	65	86	(NA)	89	89	(X)		
		1972..	136	<sup>15</sup> 1 848.8	29	43	69	91	(NA)	86	91	(X)		
		1970..	(NA)	<sup>15</sup> 2 810.2	26	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1		
		1967..	495	<sup>15</sup> 2 081.6	24	36	55	74	(NA)	92	90	(X)		
		1966..	(NA)	<sup>15</sup> 1 884.6	24	37	(NA)	(NA)	(NA)	(NA)	(NA)	2		
		1963..	566	<sup>15</sup> 1 548.7	24	37	54	70	(NA)	89	89	(X)		
		2038	Frozen specialties <sup>17</sup> -----	1982..	318	<sup>15</sup> 5 061.3	38	54	75	88	566	94	92	(X)
				1977..	330	<sup>15</sup> 3 404.4	40	55	73	88	(NA)	93	93	(X)
				1972..	388	<sup>15</sup> 1 935.5	42	54	70	86	(NA)	94	92	(X)
				2041	Flour and other grain mill products -----	1982..	251	4 932.8	40	60	78	94	551	97
		1977..	301			3 683.3	33	54	76	91	(NA)	98	71	(X)
		1972..	340			2 380.0	33	53	75	91	(NA)	97	74	(X)
1970..	(NA)	2 410.1	30			46	(NA)	(NA)	(NA)	(NA)	(NA)	1		
1967..	438	2 457.4	30			46	70	89	(NA)	93	78	(X)		
1966..	(NA)	2 344.9	31			47	(NA)	(NA)	(NA)	(NA)	(NA)	4		
1963..	510	2 176.5	35			50	71	88	(NA)	94	78	(X)		
1958..	703	1 970.0	38			51	68	85	(NA)	93	85	(X)		
1954..	692	1 858.9	40			52	68	(NA)	(NA)	94	84	(X)		
1947..	1 084	2 526.6	29			41	57	(NA)	(NA)	92	92	(X)		
1935..	(NA)	853.2	29	37	(NA)	(NA)	(NA)	(NA)	(NA)	(X)				
2043	Cereal breakfast foods -----	1982..	32	4 131.9	86	(D)	(D)	100	(X)	77	96	(X)		
		1977..	32	2 497.5	89	98	99+	100	(NA)	74	93	(X)		
		1972..	34	1 125.5	90	98	99+	100	(NA)	77	84	(X)		
		1970..	(NA)	953.1	90	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	1		
		1967..	30	793.0	88	97	99+	100	(NA)	81	82	(X)		
		1966..	(NA)	742.9	87	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	2		
		1963..	35	625.1	86	96	99+	100	(NA)	80	86	(X)		
		1958..	34	433.0	83	95	99+	100	(NA)	80	81	(X)		
		1954..	37	345.8	88	95	99+	100	(NA)	77	80	(X)		
		1947..	55	284.3	79	91	98	(NA)	(NA)	68	87	(X)		
		1935..	(NA)	(NA)	68	82	(NA)	(NA)	(NA)	(NA)	(NA)	(X)		
		2044	Rice milling -----	1982..	49	1 933.9	47	75	96	100	871	100	96	(X)
				1977..	47	1 263.4	51	76	95	100	(NA)	100	96	(X)
				1972..	48	680.6	43	68	92	100	(NA)	100	98	(X)
1970..	(NA)			550.8	50	73	(NA)	(NA)	(NA)	(NA)	(NA)	1		
1967..	54			548.4	46	68	89	99+	(NA)	100	98	(X)		
1966..	(NA)			457.6	45	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3		
1963..	62			423.0	44	66	86	99+	(NA)	100	100	(X)		
1958..	61			282.3	43	64	84	99	(NA)	100	100	(X)		
1954..	65			266.9	41	60	81	(NA)	(NA)	99	100	(X)		
1947..	75			224.7	33	48	72	(NA)	(NA)	100	100	(X)		
1935..	(NA)			(NA)	38	52	(NA)	(NA)	(NA)	(NA)	(NA)	(X)		
2045	Blended and prepared flour -----			1982..	91	1 419.1	58	74	92	99	1 003	93	58	(X)
				1977..	111	1 011.7	51	69	87	98	(NA)	94	60	(X)
				1972..	115	704.6	68	81	92	98	(NA)	77	65	(X)
		1970..	(NA)	549.8	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3		
		1967..	126	547.5	68	82	93	98	(NA)	78	63	(X)		
		1966..	(NA)	502.9	69	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	4		
		1963..	140	434.0	70	82	92	98	(NA)	78	62	(X)		
		2046	Wet corn milling -----	1982..	25	3 268.4	74	94	100	(X)	1 491	89	92	(X)
				1977..	24	2 014.8	63	89	99+	100	(NA)	94	93	(X)
				1972..	26	832.3	63	86	99+	100	(NA)	93	97	(X)
				1970..	(NA)	830.5	64	88	(NA)	(NA)	(NA)	(NA)	(NA)	1
				1967..	32	751.3	68	89	99+	100	(NA)	84	96	(X)
				1966..	(NA)	755.3	67	90	(NA)	(NA)	(NA)	(NA)	(NA)	3
				1963..	49	622.4	71	93	99	100	(NA)	83	93	(X)
1958..	53			522.0	73	92	99	99+	(NA)	91	96	(X)		
1954..	54			458.4	75	93	99	99+	(NA)	91	96	(X)		
1947..	47			460.0	77	95	99+	100	(NA)	88	96	(X)		
1935..	(NA)			(NA)	79	95	(NA)	(NA)	(NA)	(NA)	(NA)	(X)		
2047	Dog, cat, and other pet food <sup>12</sup> -----			1982..	222	4 402.2	52	71	81	91	1 167	98	93	(X)
				1977..	218	3 086.7	58	74	86	93	(NA)	92	88	(X)
				1972..	147	1 401.9	51	71	86	95	(NA)	94	87	(X)
2048	Prepared feeds, n.e.c. <sup>12</sup> -----	1982..	1 245	11 298.1	20	30	48	64	191	96	97	(X)		
		1977..	1 435	8 786.8	22	30	45	60	(NA)	96	95	(X)		
		1972..	1 579	5 037.1	23	31	43	58	(NA)	96	96	(X)		

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)		
			Total (million dollars)	Percent accounted for by <sup>4</sup> —								
				4 largest companies	8 largest companies	20 largest companies	50 largest companies					
20	FOOD AND KINDRED PRODUCTS—Con.											
2051	Bread, cake, and related products -----	1982--	1 869	13 143.3	34	47	60	73	410	97	98	(X)
		1977--	2 549	9 274.9	33	40	54	68	(NA)	99	98	(X)
		1972--	2 800	6 132.0	29	39	50	62	(NA)	98	99	(X)
		1970--	(NA)	5 607.2	29	39	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967--	3 445	5 102.7	26	38	47	58	(NA)	97	99	(X)
		1966--	(NA)	5 007.2	25	37	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963--	4 339	4 506.0	23	35	45	56	(NA)	98	99	(X)
		1958--	5 305	3 699.5	22	33	42	51	(NA)	98	99	(X)
		1954--	5 470	3 067.0	20	31	40	(NA)	(NA)	98	99	(X)
		1947--	5 985	2 403.6	16	26	36	(NA)	(NA)	98	99	(X)
		1966--	(NA)	5 007.2	25	37	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963--	4 339	4 506.0	23	35	45	56	(NA)	98	99	(X)
		1958--	5 305	3 699.5	22	33	42	51	(NA)	98	99	(X)
		1954--	5 470	3 067.0	20	31	40	(NA)	(NA)	98	99	(X)
		1947--	5 985	2 403.6	16	26	36	(NA)	(NA)	98	99	(X)
2052	Cookies and crackers-----	1982--	296	4 664.9	59	71	85	94	1 401	95	94	(X)
		1977--	263	2 960.5	59	68	83	93	(NA)	94	94	(X)
		1972--	257	1 763.5	59	69	83	93	(NA)	98	95	(X)
		1970--	(NA)	1 545.6	59	70	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967--	286	1 363.8	59	70	82	91	(NA)	97	93	(X)
		1966--	(NA)	1 327.3	59	68	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963--	286	1 150.1	59	68	80	91	(NA)	97	95	(X)
		1963--	286	1 150.1	59	68	80	91	(NA)	97	95	(X)
2061	Raw cane sugar <sup>18</sup> -----	1982--	43	1 113.9	41	61	86	100	628	100	100	(X)
		1977--	49	704.0	42	62	86	100	(NA)	100	99	(X)
		1972--	61	406.5	44	62	84	99+	(NA)	100	96	(X)
		1970--	(NA)	364.4	45	63	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967--	61	368.5	43	65	82	99+	(NA)	100	100	(X)
		1966--	(NA)	313.5	50	72	(NA)	(NA)	(NA)	(NA)	(NA)	7
		1963--	50	378.7	47	65	82	100	(NA)	99	100	(X)
		1963--	50	378.7	47	65	82	100	(NA)	99	100	(X)
2062	Cane sugar refining <sup>18</sup> -----	1982--	19	3 040.3	65	91	100	(X)	1 416	100	100	(X)
		1977--	27	2 260.0	63	90	99+	100	(NA)	99	100	(X)
		1972--	22	1 742.7	59	85	99+	100	(NA)	99	98	(X)
		1970--	(NA)	1 583.8	59	86	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967--	22	1 375.7	59	82	99+	100	(NA)	100	100	(X)
		1966--	(NA)	1 219.9	63	87	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963--	16	1 271.2	63	83	100	(X)	(NA)	100	100	(X)
		1963--	16	1 271.2	63	83	100	(X)	(NA)	100	100	(X)
2063	Beet sugar -----	1982--	14	1 515.8	67	95	100	(X)	1 396	100	100	(X)
		1977--	14	1 181.7	67	95	100	(X)	(NA)	99	99	(X)
		1972--	16	880.2	66	96	100	(X)	(NA)	99	100	(X)
		1970--	(NA)	726.6	65	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967--	15	560.7	66	96	100	(X)	(NA)	100	100	(X)
		1966--	(NA)	579.5	68	97	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963--	11	564.1	66	97	100	(X)	(NA)	100	100	(X)
		1958--	15	382.1	64	94	100	(X)	(NA)	100	100	(X)
		1954--	15	291.2	66	96	100	(X)	(NA)	100	100	(X)
		1947--	17	262.9	68	94	100	(X)	(NA)	100	100	(X)
		1935--	(NA)	(NA)	68	89	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	68	89	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	68	89	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	68	89	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2065	Confectionery products (1967 industry 2071) -----	1982--	718	6 773.1	40	53	67	81	584	94	82	(X)
		1977--	867	4 498.4	38	49	66	79	(NA)	95	83	(X)
		1972--	917	2 472.5	32	42	59	75	(NA)	95	84	(X)
		1970--	(NA)	2 276.4	30	40	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967--	1 091	1 870.2	25	35	52	69	(NA)	97	94	(X)
		1966--	(NA)	1 681.5	24	34	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963--	1 142	1 454.5	15	25	45	64	(NA)	95	95	(X)
		1958--	1 301	1 170.1	18	27	44	62	(NA)	96	96	(X)
		1954--	1 388	992.6	19	27	43	(NA)	(NA)	95	96	(X)
		1947--	1 620	994.9	17	25	39	(NA)	(NA)	97	97	(X)
		1935--	(NA)	(NA)	12	19	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	12	19	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	12	19	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	12	19	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		2066	Chocolate and cocoa products (1967 industry 2072) -----	1982--	77	2 217.4	75	89	99	99+	2 214	91
1977--	47			1 629.2	73	88	99	100	(NA)	94	43	(X)
1972--	39			735.5	74	88	99	100	(NA)	98	75	(X)
1970--	(NA)			601.5	79	90	(NA)	(NA)	(NA)	(NA)	(NA)	1
1967--	27			520.5	77	89	99+	100	(NA)	96	75	(X)
1966--	(NA)			471.0	78	90	(NA)	(NA)	(NA)	(NA)	(NA)	2
1963--	24			479.1	75	87	99+	100	(NA)	99	82	(X)
1958--	26			446.8	71	84	98	100	(NA)	98	87	(X)
1954--	27			423.8	70	83	98	100	(NA)	98	89	(X)
1947--	31			349.9	68	81	96	100	(NA)	99	100	(X)
1935--	(NA)			(NA)	67	77	(NA)	100	(NA)	(NA)	(NA)	(X)
1935--	(NA)			(NA)	67	77	(NA)	100	(NA)	(NA)	(NA)	(X)
1935--	(NA)			(NA)	67	77	(NA)	100	(NA)	(NA)	(NA)	(X)
1935--	(NA)			(NA)	67	77	(NA)	100	(NA)	(NA)	(NA)	(X)
2067	Chewing gum (1967 industry 2073)-----			1982--	9	915.3	95	(D)	(D)	(X)	(D)	79
		1977--	14	566.5	93	99	100	(X)	(NA)	92	77	(X)
		1972--	15	382.6	87	98	100	(X)	(NA)	90	88	(X)
		1970--	(NA)	407.7	85	97	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967--	19	303.7	86	96	100	(X)	(NA)	86	95	(X)
		1966--	(NA)	281.7	88	96	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963--	20	244.8	90	97	100	(X)	(NA)	88	96	(X)
		1958--	24	184.3	89	96	99+	100	(NA)	91	96	(X)
		1954--	27	158.1	86	94	99+	100	(NA)	95	98	(X)
		1947--	35	148.3	70	87	98	100	(NA)	(D)	(D)	(X)
		1935--	(NA)	(NA)	97	97	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	97	97	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	97	97	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		1935--	(NA)	(NA)	97	97	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
		2074	Cottonseed oil mills (1967 industry 2091) -----	1982--	47	933.3	51	70	92	100	834	94
1977--	62			859.2	45	62	85	99+	(NA)	88	89	(X)
1972--	74			458.7	43	61	80	99	(NA)	85	88	(X)
1970--	(NA)			375.8	39	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3
1967--	91			405.9	42	60	80	96	(NA)	85	85	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
20	FOOD AND KINDRED PRODUCTS—Con.										
2074	Cottonseed oil mills (1967 industry 2091)—Con.										
	1966..	(NA)	560.8	38	56	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963..	115	555.2	41	56	72	91	(NA)	89	91	(X)
	1958..	125	383.4	42	54	71	91	(NA)	92	92	(X)
	1954..	145	546.4	47	57	72	(NA)	(NA)	96	93	(X)
	1947..	177	518.1	43	55	68	(NA)	(NA)	90	99	(X)
	1935..	(NA)	187.9	32	43	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2075	Soybean oil mills (1967 industry 2092) -----							1 204	88	95	(X)
	1982..	52	8 603.6	61	83	(D)	(D)	(NA)	87	98	(X)
	1977..	65	7 580.0	54	73	94	99+	(NA)	85	96	(X)
	1972..	54	3 357.2	54	69	92	99+	(NA)	(NA)	(NA)	1
	1970..	(NA)	2 609.9	56	73	(NA)	(NA)	(NA)	(NA)	96	(X)
	1967..	60	2 148.3	55	76	94	100	(NA)	86	96	(X)
	1966..	(NA)	2 009.8	57	78	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	68	1 473.4	50	70	88	99+	(NA)	89	95	(X)
	1958..	1966	999.2	40	63	86	99+	(NA)	87	94	(X)
	1954..	55	826.4	41	64	89	(NA)	(NA)	88	96	(X)
	1947..	105	585.7	44	63	81	(NA)	(NA)	96	80	(X)
2076	Vegetable oil mills, n.e.c. (1967 industry 2093) -----							992	93	78	(X)
	1982..	26	556.9	52	83	99+	100	(NA)	86	58	(X)
	1977..	37	360.8	54	80	98	100	(NA)	93	63	(X)
	1972..	28	261.0	70	89	99+	100	(NA)	(NA)	(NA)	1
	1970..	(NA)	237.5	60	84	(NA)	(NA)	(NA)	80	74	(X)
	1967..	34	236.7	56	78	99	100	(NA)	(NA)	(NA)	18
	1966..	(NA)	(265.7)	53	76	(NA)	(NA)	(NA)	84	83	(X)
	1963..	39	234.2	58	83	99	100	(NA)	80	93	(X)
	201958..	38	216.1	66	93	(NA)	100	(NA)	(NA)	(NA)	8
2077	Animal and marine fats and oils (1967 industry 2094) -----							414	97	68	(X)
	1982..	270	1 752.5	34	48	66	84	(NA)	94	68	(X)
	1977..	384	1 655.0	28	40	58	75	(NA)	94	68	(X)
	1972..	402	764.7	28	37	52	70	(NA)	94	68	(X)
	1970..	(NA)	790.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	8
	1967..	477	557.9	28	36	49	66	(NA)	94	67	(X)
	1966..	(NA)	(765.3)	25	32	(NA)	(NA)	(NA)	94	66	(X)
	1963..	516	474.0	23	31	43	61	(NA)	94	66	(X)
	211958..	(NA)	362.4	20	30	(NA)	(NA)	(NA)	(NA)	(NA)	12
2079	Shortening and cooking oils (1967 industry 2096) ---							629	85	77	(X)
	1982..	79	4 905.6	43	60	84	99	(NA)	89	77	(X)
	1977..	66	4 025.0	43	63	90	99+	(NA)	89	77	(X)
	1972..	64	2 068.1	44	70	93	99+	(NA)	89	78	(X)
	1970..	(NA)	1 887.5	46	72	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	63	1 725.6	43	67	93	99+	(NA)	87	86	(X)
	1966..	(NA)	1 687.4	47	73	(NA)	(NA)	(NA)	88	89	(X)
	1963..	65	1 324.3	42	64	92	99+	(NA)	93	90	(X)
	221958..	62	1 152.6	44	69	(NA)	(NA)	(NA)	93	90	(X)
2082	Malt beverages -----							2 089	100	100	(X)
	1982..	67	11 183.2	77	94	99	100	(NA)	100	100	(X)
	1977..	81	6 652.6	64	83	98	99+	(NA)	100	100	(X)
	1972..	108	4 054.4	52	70	91	99	(NA)	100	100	(X)
	1970..	(NA)	3 684.6	46	64	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	125	2 929.7	40	59	86	98	(NA)	100	100	(X)
	1966..	(NA)	2 699.9	39	56	(NA)	(NA)	(NA)	100	100	2
	231963..	171	2 315.1	34	52	78	94	(NA)	100	100	(X)
	1958..	211	1 979.7	28	44	68	88	(NA)	100	100	(X)
	1954..	263	1 857.1	27	41	60	(NA)	(NA)	100	100	(X)
	1947..	404	1 316.0	21	30	44	(NA)	(NA)	100	99	(X)
	1935..	(NA)	(NA)	11	17	(NA)	(NA)	(NA)	100	100	(X)
2083	Malt -----							1 168	100	(D)	(X)
	1982..	24	661.5	60	83	99	100	(NA)	100	100	(X)
	1977..	27	499.3	59	81	98	100	(NA)	97	99	(X)
	1972..	30	226.3	48	74	98	100	(NA)	(NA)	(NA)	2
	1970..	(NA)	202.8	(S)	(S)	(NA)	(NA)	(NA)	97	100	(X)
	1967..	32	216.5	39	62	94	100-	(NA)	97	100	(X)
	1966..	(NA)	205.5	41	64	(NA)	(NA)	(NA)	100	95	(X)
	1963..	29	183.5	38	62	95	100	(NA)	100	98	(X)
	1958..	32	183.4	50	70	95	100	(NA)	100	100	(X)
	1954..	35	202.0	49	69	93	100	(NA)	100	100	(X)
	1947..	41	256.2	49	69	92	100	(NA)	100	100	(X)
	1935..	(NA)	(NA)	44	65	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2084	Wines, brandy, and brandy spirits -----							794	98	98	(X)
	1982..	324	10996.7	51	64	84	93	(NA)	98	97	(X)
	1977..	233	101 362.5	49	62	84	94	(NA)	98	96	(X)
	1972..	183	10407.9	53	68	84	95	(NA)	97	94	(X)
	1970..	(NA)	10278.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967..	175	10196.8	48	63	81	68	(NA)	97	94	(X)
	1966..	(NA)	10193.4	41	56	(NA)	(NA)	(NA)	98	99	(X)
	1963..	194	10137.3	44	62	76	90	(NA)	98	96	(X)
	1958..	216	10101.7	35	50	70	87	(NA)	98	96	(X)
	1954..	244	1096.7	38	54	71	(NA)	(NA)	(NA)	(NA)	4
	241947..	379	1095.0	26	42	55	(NA)	(NA)	(NA)	100	(X)
2085	Distilled liquor, except brandy-----							741	97	96	(X)
	1982..	71	153 126.1	46	68	89	99+	(NA)	98	98	(X)
	1977..	64	152 296.1	52	71	91	99+	(NA)	98	99	(X)
	1972..	76	151 797.9	47	73	91	99	(NA)	98	99	(X)
	1970..	(NA)	151 757.8	47	68	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967..	70	151 364.2	54	71	88	99	(NA)	98	98	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

(For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices)

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	4 largest companies	8 largest companies	20 largest companies	50 largest companies				
<b>20</b>	<b>FOOD AND KINDRED PRODUCTS—Con.</b>										
2085	Distilled liquor, except brandy—Con.										
	1966--	(NA)	<sup>151</sup> 331.6	55	72	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963--	70	<sup>151</sup> 080.5	58	74	92	99	(NA)	98	99	(X)
	1958--	88	<sup>158</sup> 30.2	60	77	94	99	(NA)	98	100	(X)
	1954--	98	<sup>157</sup> 11.3	64	79	93	(NA)	(NA)	99	100	(X)
	1947--	144	<sup>158</sup> 70.2	75	86	95	(NA)	(NA)	99	99	(X)
	1935--	(NA)	(NA)	51	71	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2086	Bottled and canned soft drinks -----										
	1982--	1 236	16 807.5	14	23	39	56	109	98	96	(X)
	1977--	1 758	10 007.2	15	22	36	50	(NA)	98	97	(X)
	1972--	2 273	5 453.8	14	21	32	44	(NA)	98	97	(X)
	1970--	(NA)	4 605.3	13	20	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	3 057	3 173.2	13	20	28	38	(NA)	98	96	(X)
	1966--	(NA)	2 734.9	14	20	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	3 569	2 210.9	12	17	24	34	(NA)	98	95	(X)
	1958--	3 989	1 434.9	11	15	22	28	(NA)	98	98	(X)
	1954--	4 334	1 113.1	10	14	21	(NA)	(NA)	98	99	(X)
	1947--	5 169	748.2	10	14	20	(NA)	(NA)	99	99	(X)
	1935--	(NA)	(NA)	8	13	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2087	Flavoring extracts and syrups, n.e.c. -----										
	1982--	297	4 236.8	65	71	81	90	1 557	93	88	(X)
	1977--	319	2 511.3	64	71	78	88	(NA)	92	86	(X)
	1972--	350	1 472.0	66	74	82	89	(NA)	87	86	(X)
	1970--	(NA)	1 318.8	61	69	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	401	1 009.1	67	75	82	90	(NA)	94	85	(X)
	1966--	(NA)	974.4	63	71	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963--	492	729.7	62	70	78	86	(NA)	90	78	(X)
	1958--	498	494.9	55	67	78	87	(NA)	90	83	(X)
	1954--	530	446.1	53	63	75	(NA)	(NA)	91	87	(X)
	1947--	582	313.6	50	58	68	(NA)	(NA)	93	89	(X)
	1935--	(NA)	(NA)	47	54	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2091	Canned and cured seafoods (1967 industry 2031) --										
	1982--	170	<sup>151</sup> 849.1	62	70	81	93	1 683	(D)	91	(X)
	1977--	215	<sup>151</sup> 440.6	52	65	79	91	(NA)	81	96	(X)
	1972--	258	<sup>158</sup> 09.8	50	65	77	89	(NA)	87	92	(X)
	1970--	(NA)	<sup>156</sup> 60.9	53	69	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	268	<sup>155</sup> 23.1	44	59	73	85	(NA)	92	95	(X)
	1966--	(NA)	<sup>155</sup> 48.1	42	56	(NA)	(NA)	(NA)	(NA)	(NA)	4
	<sup>181</sup> 1963--	345	<sup>154</sup> 52.5	38	51	56	80	(NA)	92	95	(X)
2092	Fresh or frozen packaged fish (1967 industry 2036) --										
	1982--	697	<sup>154</sup> 009.1	14	24	42	60	118	97	97	(X)
	<sup>25</sup> 1977--	906	<sup>152</sup> 664.9	14	23	42	59	(NA)	97	97	(X)
	1972--	470	<sup>151</sup> 084.4	20	32	53	74	(NA)	96	96	(X)
	1970--	(NA)	<sup>156</sup> 55.0	25	38	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	463	<sup>155</sup> 57.4	26	38	56	72	(NA)	97	94	(X)
	1966--	(NA)	492.7	33	48	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963--	528	391.2	25	38	53	68	(NA)	95	94	(X)
	1958--	429	282.7	18	30	47	68	(NA)	93	96	(X)
	<sup>26</sup> 1954--	288	164.6	24	37	56	(NA)	(NA)	94	95	(X)
2095	Roasted coffee -----										
	1982--	118	5 826.9	65	76	90	98	1 536	94	99	(X)
	1977--	133	5 616.4	61	73	89	97	(NA)	96	98	(X)
	1972--	162	2 328.7	65	79	92	97	(NA)	94	97	(X)
	1970--	(NA)	2 405.5	58	74	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	206	2 092.2	53	71	87	96	(NA)	91	99	(X)
	1966--	(NA)	2 082.5	54	70	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	261	1 868.1	52	68	84	94	(NA)	90	99	(X)
2097	Manufactured ice-----										
	1982--	530	229.5	18	26	40	56	125	100	98	(X)
	1977--	543	149.4	24	38	49	61	(NA)	99	99	(X)
	1972--	610	116.4	32	44	53	63	(NA)	100	99	(X)
	1970--	(NA)	115.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1967--	688	99.5	33	42	50	61	(NA)	100	99	(X)
	1966--	(NA)	124.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	8
	1963--	862	122.6	32	39	48	59	(NA)	99	100	(X)
	1958--	1 099	130.1	31	41	49	59	(NA)	99	99	(X)
	1954--	1 430	143.3	26	32	41	(NA)	(NA)	100	97	(X)
	1947--	2 206	273.4	22	30	40	(NA)	(NA)	100	98	(X)
	1935--	(NA)	(NA)	20	28	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2098	Macaroni and spaghetti -----										
	1982--	208	1 065.0	42	66	85	95	646	98	83	(X)
	1977--	189	662.0	36	54	77	94	(NA)	99	83	(X)
	1972--	179	348.3	38	53	76	93	(NA)	99	91	(X)
	1970--	(NA)	315.7	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967--	190	266.0	31	48	73	93	(NA)	97	98	(X)
	1966--	(NA)	237.7	31	46	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963--	207	222.9	31	47	71	91	(NA)	96	94	(X)
	1958--	205	167.5	25	41	64	87	(NA)	97	98	(X)
	1954--	226	149.7	26	37	58	(NA)	(NA)	98	95	(X)
	1947--	219	112.1	23	35	56	(NA)	(NA)	98	99	(X)
	1935--	(NA)	(NA)	16	26	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2099	Food preparations, n.e.c.-----										
	1982--	1 746	10 979.3	32	40	52	65	372	92	80	(X)
	1977--	1 872	6 531.0	28	36	51	64	(NA)	89	75	(X)
	1972--	1 856	3 647.9	26	36	51	67	(NA)	90	76	(X)
	1970--	(NA)	3 143.6	26	36	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	1 824	2 413.3	24	35	51	66	(NA)	90	82	(X)
	1966--	(NA)	2 206.0	26	37	(NA)	(NA)	(NA)	(NA)	(NA)	7
	1963--	1 977	1 797.3	24	33	48	64	(NA)	91	78	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)		
			Total (million dollars)	Percent accounted for by <sup>4</sup> —									
				4 largest companies	8 largest companies	20 largest companies	50 largest companies						
21	TOBACCO PRODUCTS												
2111	Cigarettes -----	1982..	8	<sup>15</sup> 12 126.8	(D)	(D)	(X)	(X)	2 623	97	(D)	(X)	
		1977..	8	<sup>15</sup> 6 377.4	(D)	(D)	(X)	(X)	(NA)	97	99	(X)	
		1972..	7	<sup>15</sup> 3 744.6	(D)	(D)	(X)	(X)	(NA)	96	100	(X)	
		1970..	(NA)	<sup>15</sup> 3 503.4	84	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1	
		1967..	8	<sup>15</sup> 3 044.6	81	100	(X)	(X)	(NA)	97	100	(X)	
		1966..	(NA)	<sup>15</sup> 2 860.3	81	100	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1963..	7	<sup>15</sup> 2 655.3	80	100	(X)	(X)	(NA)	97	100	(X)	
		1958..	12	<sup>15</sup> 2 159.1	79	99+	100	(X)	(NA)	99	100	(X)	
		1954..	12	<sup>15</sup> 1 641.0	82	99+	100	(X)	(NA)	99	100	(X)	
		1947..	19	<sup>15</sup> 1 131.9	90	99+	100	(X)	(NA)	96	100	(X)	
		1935..	(NA)	(NA)	89	99	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	
	2121	Cigars-----	1982..	54	<sup>15</sup> 253.7	60	82	97	99+	1 085	99	92	(X)
			1977..	94	<sup>15</sup> 242.7	56	79	95	99	(NA)	(D)	92	(X)
			1972..	113	<sup>15</sup> 338.7	56	81	95	99	(NA)	100	91	(X)
			1970..	(NA)	<sup>15</sup> 375.3	61	83	(NA)	(NA)	(NA)	(NA)	(NA)	1
			1967..	126	<sup>15</sup> 363.7	59	83	96	99+	(NA)	100	98	(X)
		1966..	(NA)	<sup>15</sup> 378.8	58	82	(NA)	(NA)	(NA)	(NA)	(NA)	6	
		1963..	164	<sup>15</sup> 358.5	59	81	92	99	(NA)	100	100	(X)	
		1958..	247	<sup>15</sup> 351.6	54	75	86	96	(NA)	100	100	(X)	
		1954..	375	<sup>15</sup> 339.5	44	64	80	(NA)	(NA)	99	100	(X)	
		1947..	765	<sup>15</sup> 311.4	41	57	76	(NA)	(NA)	99	100	(X)	
		1935..	(NA)	(NA)	38	50	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	
2131		Chewing and smoking tobacco -----	1982..	22	<sup>15</sup> 665.4	87	97	(D)	(D)	2 564	(D)	84	(X)
			1977..	28	<sup>15</sup> 354.3	81	95	99+	100	(NA)	97	75	(X)
			1972..	28	<sup>15</sup> 180.2	71	92	99+	100	(NA)	96	64	(X)
			1970..	(NA)	<sup>15</sup> 178.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1
			1967..	41	<sup>15</sup> 122.2	51	81	98	100	(NA)	96	58	(X)
		1966..	(NA)	<sup>15</sup> 146.9	59	82	(NA)	(NA)	(NA)	(NA)	(NA)	6	
		1963..	45	<sup>15</sup> 139.5	58	83	98	100	(NA)	97	61	(X)	
		1958..	52	<sup>15</sup> 173.7	57	82	98	99+	(NA)	98	88	(X)	
		1954..	58	<sup>15</sup> 161.7	58	82	99	(NA)	(NA)	96	89	(X)	
		1947..	65	<sup>15</sup> 140.1	61	81	98	(NA)	(NA)	98	86	(X)	
		1935..	(NA)	(NA)	56	84	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	
	2141	Tobacco stemming and redrying -----	1982..	34	<sup>15</sup> 3 015.4	68	92	99+	100	1 423	(D)	(D)	(X)
			1977..	38	<sup>15</sup> 2 076.2	67	85	98	100	(NA)	(D)	94	(X)
			1972..	46	<sup>15</sup> 1 656.8	67	87	98	100	(NA)	100	97	(X)
			1970..	(NA)	<sup>15</sup> 1 288.3	66	87	(NA)	(NA)	(NA)	(NA)	(NA)	1
			1967..	54	<sup>15</sup> 1 373.1	63	87	97	99+	(NA)	100	99	(X)
		1966..	(NA)	<sup>15</sup> 1 386.8	69	91	(NA)	(NA)	(NA)	(NA)	(NA)	5	
		1963..	59	<sup>15</sup> 1 366.6	70	92	97	99+	(NA)	100	100	(X)	
		1958..	64	<sup>15</sup> 1 037.0	73	90	96	99+	(NA)	100	100	(X)	
		1954..	72	<sup>15</sup> 1 043.2	79	91	96	(NA)	(NA)	100	99	(X)	
		1947..	93	<sup>15</sup> 957.8	88	95	97	(NA)	(NA)	100	98	(X)	
22		TEXTILE MILL PRODUCTS											
2211		Weaving mills, cotton -----	1982..	209	3 972.0	41	65	85	97	645	84	54	(X)
			1977..	211	4 431.2	39	58	79	95	(NA)	84	62	(X)
			1972..	190	2 660.6	31	48	72	93	(NA)	84	60	(X)
			1970..	(NA)	2 547.3	33	50	(NA)	(NA)	(NA)	(NA)	(NA)	1
			1967..	218	3 327.7	30	48	68	88	(NA)	87	79	(X)
		1966..	(NA)	3 561.9	30	48	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1963..	229	3 104.1	30	46	67	87	(NA)	92	80	(X)	
		1958..	321	2 719.4	25	40	59	79	(NA)	94	82	(X)	
		1954..	413	2 789.6	18	29	49	(NA)	(NA)	94	84	(X)	
	2221	Weaving mills, manmade fiber and silk -----	1982..	342	8 191.2	40	53	69	85	510	89	62	(X)
			1977..	267	6 325.9	42	58	76	90	(NA)	86	63	(X)
			1972..	256	3 856.6	39	54	72	88	(NA)	81	74	(X)
			1970..	(NA)	3 138.1	42	54	(NA)	(NA)	(NA)	(NA)	(NA)	1
			1967..	272	2 289.6	46	54	68	86	(NA)	85	74	(X)
			1966..	(NA)	2 240.9	40	50	(NA)	(NA)	(NA)	(NA)	(NA)	2
			1963..	277	1 722.4	39	48	64	82	(NA)	86	82	(X)
		1958..	328	1 230.7	34	44	62	78	(NA)	85	88	(X)	
		1954..	396	1 142.6	30	39	55	(NA)	(NA)	87	90	(X)	
		1947..	432	1 002.9	31	39	56	(NA)	(NA)	85	(NA)	(X)	
2231		Weaving and finishing mills, wool -----	1982..	115	762.8	45	59	85	97	1 048	88	75	(X)
			1977..	153	583.3	31	47	74	95	(NA)	83	80	(X)
			1972..	178	450.1	38	49	70	90	(NA)	84	83	(X)
			1970..	(NA)	770.4	54	62	(NA)	(NA)	(NA)	(NA)	(NA)	1
			1967..	262	1 090.0	55	62	76	88	(NA)	82	96	(X)
			1966..	(NA)	1 166.8	56	62	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963..	304	1 010.7	51	58	71	85	(NA)	86	96	(X)	
2241	Narrow fabric mills -----	1982..	241	851.8	20	31	53	78	209	95	97	(X)	
		1977..	291	682.9	17	28	48	73	(NA)	96	97	(X)	
		1972..	324	566.2	20	31	49	71	(NA)	93	97	(X)	
		1970..	(NA)	513.7	27	37	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1967..	345	445.1	19	31	48	70	(NA)	94	96	(X)	

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)		
			Total (million dollars)	Percent accounted for by <sup>4</sup> —								
				4 largest companies	8 largest companies	20 largest companies	50 largest companies					
22	TEXTILE MILL PRODUCTS—Con.											
2241	Narrow fabric mills—Con.											
	1966--	(NA)	427.8	23	35	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1963--	350	349.1	20	30	47	68	(NA)	91	97	(X)	
	1958--	455	289.1	16	26	41	62	(NA)	94	97	(X)	
	1954--	489	250.2	13	21	37	(NA)	(NA)	96	94	(X)	
	<sup>27</sup> 1947--	445	215.2	17	25	41	(NA)	(NA)	95	98	(X)	
2251	Women's hosiery, except socks -----	1982--	180	1 411.3	58	66	81	95	1 539	95	91	(X)
	1977--	176	871.2	50	62	78	94	(NA)	91	95	(X)	
	1972--	256	984.7	35	49	69	87	(NA)	94	97	(X)	
	1970--	(NA)	1 352.6	38	52	(NA)	(NA)	(NA)	(NA)	(NA)	1	
	1967--	302	835.0	32	44	64	82	(NA)	97	95	(X)	
	1966--	(NA)	733.7	34	45	(NA)	(NA)	(NA)	(NA)	(NA)	7	
	1963--	363	606.6	34	47	64	79	(NA)	96	94	(X)	
2252	Hosiery, n.e.c. -----	1982--	376	1 443.4	20	29	48	70	192	92	95	(X)
	1977--	382	921.3	20	30	46	66	(NA)	96	96	(X)	
	1972--	375	600.6	19	29	46	66	(NA)	95	94	(X)	
	1970--	(NA)	566.6	24	33	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1967--	423	550.1	25	32	46	65	(NA)	90	95	(X)	
	1966--	(NA)	576.4	22	28	(NA)	(NA)	(NA)	(NA)	(NA)	6	
	1963--	504	451.1	18	25	38	58	(NA)	91	96	(X)	
2253	Knit outerwear mills <sup>28</sup> -----	1982--	896	3 182.4	19	29	45	64	156	95	53	(X)
	1977--	903	2 335.9	17	27	46	63	(NA)	90	53	(X)	
	1972--	882	1 703.8	16	26	44	59	(NA)	92	63	(X)	
	1970--	(NA)	1 237.0	14	21	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1967--	1 156	1 288.0	15	22	33	47	(NA)	93	65	(X)	
	1966--	(NA)	1 273.1	14	21	(NA)	(NA)	(NA)	(NA)	(NA)	7	
	1963--	1 175	1 045.5	11	16	27	43	(NA)	93	68	(X)	
	1958--	1 111	744.3	7	10	20	35	(NA)	91	74	(X)	
	1954--	1 081	544.1	6	10	20	(NA)	(NA)	93	73	(X)	
	1947--	1 196	330.5	8	13	24	(NA)	(NA)	91	82	(X)	
2254	Knit underwear mills <sup>28</sup> -----	1982--	72	829.9	46	65	90	99+	886	88	93	(X)
	1977--	80	648.9	42	59	85	99	(NA)	80	86	(X)	
	1972--	74	544.6	46	61	85	98	(NA)	90	94	(X)	
	1970--	(NA)	499.6	37	53	(NA)	(NA)	(NA)	(NA)	(NA)	4	
	1967--	99	445.3	36	54	77	95	(NA)	85	35	(X)	
	1966--	104	364.8	33	54	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1963--	104	364.8	33	52	73	93	(NA)	89	38	(X)	
	1958--	133	299.5	28	43	64	87	(NA)	88	89	(X)	
	1954--	140	256.3	26	40	64	(NA)	(NA)	88	(NA)	(X)	
	1947--	140	295.4	21	34	57	(NA)	(NA)	87	70	(X)	
2257	Circular knit fabric mills <sup>12</sup> -----	1982--	384	2 538.8	22	36	55	75	220	92	93	(X)
	1977--	462	3 169.4	20	31	51	73	(NA)	90	88	(X)	
	1972--	629	2 808.8	23	31	49	69	(NA)	93	91	(X)	
2258	Warp knit fabric mills <sup>12</sup> -----	1982--	186	1 465.8	33	50	71	89	432	97	90	(X)
	1977--	213	1 427.2	26	40	64	86	(NA)	93	83	(X)	
	1972--	174	987.7	27	46	72	91	(NA)	90	95	(X)	
2259	Knitting mills, n.e.c. <sup>28</sup> -----	1982--	71	114.5	45	61	83	99	813	97	81	(X)
	1977--	191	95.7	30	42	59	80	(NA)	97	81	(X)	
	1972--	72	73.1	52	67	83	98	(NA)	93	78	(X)	
	1970--	(NA)	48.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	6	
	1967--	61	38.8	54	71	89	99	(NA)	96	19	(X)	
	1966--	(NA)	(55.4)	32	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	22	
	1963--	86	40.7	34	50	75	96	(NA)	93	22	(X)	
	<sup>29</sup> 1958--	71	29.2	34	54	(NA)	(NA)	(NA)	91	78	(X)	
2261	Finishing plants, cotton -----	1982--	266	753.8	42	63	81	92	647	85	40	(X)
	1977--	194	759.5	29	47	75	93	(NA)	83	35	(X)	
	1972--	182	623.3	27	41	67	89	(NA)	79	41	(X)	
	1970--	(NA)	603.0	34	48	(NA)	(NA)	(NA)	(NA)	(NA)	1	
	1967--	202	893.9	42	59	64	87	(NA)	75	58	(X)	
	1966--	(NA)	853.9	44	60	(NA)	(NA)	(NA)	(NA)	(NA)	4	
	1963--	220	869.7	45	59	77	92	(NA)	81	60	(X)	
2262	Finishing plants, manmade -----	1982--	265	3 186.2	(D)	68	80	91	1 646	82	66	(X)
	1977--	248	2 404.3	60	70	80	91	(NA)	80	57	(X)	
	1972--	219	1 365.2	56	64	77	89	(NA)	77	57	(X)	
	1970--	(NA)	1 011.6	45	54	(NA)	(NA)	(NA)	(NA)	(NA)	1	
	1967--	212	550.2	37	49	63	81	(NA)	90	45	(X)	
	1966--	(NA)	550.3	42	54	(NA)	(NA)	(NA)	(NA)	(NA)	3	
	1963--	193	323.7	31	44	61	81	(NA)	91	46	(X)	
2269	Finishing plants, n.e.c. -----	1982--	177	1 031.9	30	43	67	87	345	90	57	(X)
	1977--	176	830.6	30	43	66	86	(NA)	95	43	(X)	
	1972--	189	637.3	(S)	(S)	(S)	86	(NA)	92	54	(X)	
	1970--	(NA)	346.3	26	40	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1967--	187	290.9	29	44	64	86	(NA)	84	52	(X)	
	1966--	(NA)	273.0	32	48	(NA)	(NA)	(NA)	(NA)	(NA)	3	
	1963--	174	206.9	32	47	68	86	(NA)	89	64	(X)	
2271	Woven carpets and rugs -----	1982--	59	1083.0	71	85	95	99+	1 733	(D)	(D)	(X)
	1977--	71	1047.1	67	81	94	99+	(NA)	(D)	81	(X)	
	1972--	64	1093.2	78	91	98	99+	(NA)	89	85	(X)	
	1970--	(NA)	10102.1	80	90	(NA)	(NA)	(NA)	(NA)	(NA)	1	
	1967--	55	10104.7	76	93	99+	99	(NA)	84	84	(X)	
	1966--	(NA)	10115.7	75	88	(NA)	(NA)	(NA)	(NA)	(NA)	6	
	1963--	56	10120.0	67	88	98	99+	(NA)	77	92	(X)	

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
22	TEXTILE MILL PRODUCTS—Con.										
2272	Tufted carpets and rugs ----- 1982--	323	5 440.4	25	40	65	84	297	97	99	(X)
	1977--	397	4 520.7	21	35	59	79	(NA)	96	99	(X)
	1972--	333	2 775.2	20	33	56	78	(NA)	97	98	(X)
	1970--	(NA)	1 898.3	25	40	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	210	1 426.9	26	41	67	87	(NA)	96	99	(X)
	1966--	(NA)	1 206.4	26	43	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	167	801.8	25	41	65	87	(NA)	96	96	(X)
2279	Carpets and rugs, n.e.c. ----- 1982--	79	149.7	66	78	92	99	1 892	80	71	(X)
	1977--	72	115.2	69	82	93	99	(NA)	(D)	74	(X)
	1972--	79	157.9	78	88	94	99	(NA)	62	71	(X)
	1970--	(NA)	200.6	76	88	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	78	90.2	78	84	93	99	(NA)	83	69	(X)
	1966--	(NA)	75.4	67	75	(NA)	(NA)	(NA)	(NA)	(NA)	11
	1963--	103	29.6	32	49	76	95	(NA)	89	46	(X)
2281	Yarn mills, except wool ----- 1982--	206	4 327.6	22	34	56	82	227	93	74	(X)
	1977--	274	3 864.9	19	31	51	75	(NA)	92	72	(X)
	1972--	263	2 248.3	21	31	50	74	(NA)	92	86	(X)
	1970--	(NA)	1 644.9	24	33	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	256	1 422.5	21	31	51	73	(NA)	95	84	(X)
	1966--	(NA)	1 478.5	19	30	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	234	1 067.0	17	27	46	68	(NA)	96	83	(X)
2282	Throwing and winding mills (1972 industry 2282) <sup>12 30</sup> ----- 1982--	160	1 944.7	51	62	77	92	740	94	49	(X)
	1977--	170	1 510.1	44	54	71	89	(NA)	92	55	(X)
2283	Wool yarn mills ----- 1982--	71	185.3	35	52	79	99	487	92	64	(X)
	1977--	71	194.9	51	66	87	99	(NA)	90	71	(X)
	1972--	91	221.4	45	59	83	97	(NA)	72	69	(X)
	1970--	(NA)	365.6	35	53	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	127	361.5	26	42	68	91	(NA)	79	80	(X)
	1966--	(NA)	407.3	29	45	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963--	136	422.2	26	41	65	90	(NA)	85	82	(X)
2284	Thread mills <sup>27</sup> ----- 1982--	60	578.8	61	77	93	99 +	1 060	97	90	(X)
	1977--	58	544.4	57	77	93	99 +	(NA)	96	91	(X)
	1972--	61	345.4	62	77	92	99 +	(NA)	92	90	(X)
	1970--	(NA)	300.7	64	83	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	63	256.6	62	81	95	99 +	(NA)	90	90	(X)
	1966--	(NA)	264.3	62	80	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963--	59	194.1	68	85	96	99 +	(NA)	93	90	(X)
	1958--	72	175.5	66	79	93	99 +	(NA)	90	91	(X)
	1954--	84	183.7	66	78	92	(NA)	(NA)	88	94	(X)
	1947--	83	154.3	65	78	90	(NA)	(NA)	85	(NA)	(X)
2291	Felt goods, except woven felts and hats ----- 1982--	40	249.7	58	81	98	100	1 110	96	89	(X)
	1977--	37	197.7	58	81	98	100	(NA)	82	82	(X)
	1972--	38	146.5	51	75	96	100	(NA)	77	82	(X)
	1970--	(NA)	109.5	59	84	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967--	33	133.6	61	80	98	100	(NA)	76	72	(X)
	1966--	(NA)	144.9	59	80	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963--	28	134.0	54	75	98	100	(NA)	86	88	(X)
	1958--	<sup>31</sup> 61	91.4	45	66	94	99 +	(NA)	89	86	(X)
	1954--	65	92.9	41	65	92	(NA)	(NA)	90	92	(X)
	1947--	37	59.8	56	81	97	100	(NA)	95	97	(X)
	1935--	(NA)	(NA)	61	81	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2292	Lace goods ----- 1982--	63	72.2	47	64	88	99	732	97	94	(X)
	1977--	68	45.9	51	68	87	99	(NA)	98	98	(X)
	1972--	99	47.1	34	51	75	94	(NA)	93	89	(X)
	1970--	(NA)	92.7	29	47	(NA)	(NA)	(NA)	(NA)	(NA)	8
	1967--	134	65.7	31	52	74	92	(NA)	99	94	(X)
	1966--	(NA)	(52.6)	36	62	(NA)	(NA)	(NA)	(NA)	(NA)	16
	1963--	<sup>32</sup> 145	53.0	27	47	71	89	(NA)	98	91	(X)
	1958--	<sup>31</sup> 204	61.9	21	36	63	82	(NA)	98	95	(X)
	1954--	133	59.8	23	39	84	(NA)	(NA)	99	94	(X)
	1947--	93	68.7	26	47	77	(NA)	(NA)	94	97	(X)
	1935--	(NA)	(NA)	38	59	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2293	Paddings and upholstery filling ----- 1982--	86	284.4	35	52	74	96	444	93	89	(X)
	1977--	113	251.8	30	47	70	92	(NA)	92	84	(X)
	1972--	119	134.6	28	40	62	87	(NA)	86	73	(X)
	1970--	(NA)	173.9	35	51	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	133	168.1	34	50	69	88	(NA)	86	82	(X)
	1966--	(NA)	204.6	29	41	(NA)	(NA)	(NA)	(NA)	(NA)	11
	1963--	<sup>32</sup> 168	156.5	28	42	64	85	(NA)	84	81	(X)
	1958--	177	132.2	25	38	60	81	(NA)	92	88	(X)
	1954--	179	148.8	32	50	69	(NA)	(NA)	91	90	(X)
	1947--	124	110.4	41	53	74	(NA)	(NA)	96	92	(X)
2294	Processed textile waste ----- 1982--	97	296.9	49	64	83	96	871	93	96	(X)
	1977--	95	178.4	43	60	82	96	(NA)	98	95	(X)
	1972--	102	133.8	54	68	86	97	(NA)	100	92	(X)
	1970--	(NA)	86.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	9
	1967--	132	91.5	36	50	70	89	(NA)	96	92	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
22	TEXTILE MILL PRODUCTS—Con.										
2294	Processed textile waste—Con.										
	1966..	(NA)	118.7	41	49	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963..	<sup>32</sup> 137	87.5	38	52	69	87	(NA)	95	86	(X)
	1958..	<sup>31</sup> 181	80.8	21	34	56	79	(NA)	96	93	(X)
	1954..	198	85.0	18	31	55	(NA)	(NA)	96	93	(X)
	1947..	177	57.3	23	35	57	(NA)	(NA)	94	91	(X)
2295	Coated fabrics, not rubberized .....										
	1982..	188	1 115.0	22	36	58	81	236	88	87	(X)
	1977..	175	1 059.0	39	56	74	89	(NA)	87	89	(X)
	1972..	185	865.8	35	52	73	88	(NA)	87	87	(X)
	1970..	(NA)	677.8	33	53	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	157	616.2	31	48	70	88	(NA)	87	89	(X)
	1966..	(NA)	595.2	32	49	(NA)	(NA)	(NA)	(NA)	(NA)	7
	1963..	149	435.7	34	54	79	92	(NA)	86	83	(X)
	1958..	122	249.8	42	57	76	95	(NA)	82	80	(X)
	1954..	103	212.3	43	61	82	(NA)	(NA)	86	82	(X)
	1947..	106	162.6	34	53	81	(NA)	(NA)	84	82	(X)
2296	Tire cord and fabric .....										
	1982..	12	981.5	81	99	100	(X)	2 584	90	99	(X)
	1977..	8	1 013.2	80	100	(X)	(X)	(NA)	90	99	(X)
	1972..	9	685.1	84	98	(D)	(X)	(NA)	91	97	(X)
	1970..	(NA)	597.1	83	97	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	12	444.1	83	96	100	(X)	(NA)	84	90	(X)
	1966..	(NA)	504.7	82	94	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	12	375.7	79	96	100	(X)	(NA)	87	91	(X)
2297	Nonwoven fabrics <sup>33</sup> .....										
	1982..	114	1 278.7	40	56	77	94	544	90	68	(X)
	1977..	81	864.4	36	55	81	98	(NA)	86	66	(X)
	1972..	68	397.4	43	62	84	99	(NA)	84	61	(X)
2298	Cordage and twine .....										
	1982..	164	358.7	28	45	70	87	340	92	91	(X)
	1977..	151	332.2	34	50	73	91	(NA)	90	95	(X)
	1972..	134	191.0	36	56	76	91	(NA)	86	92	(X)
	1970..	(NA)	149.0	42	59	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967..	147	188.8	34	52	77	94	(NA)	86	88	(X)
	1966..	(NA)	164.7	38	54	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963..	148	149.3	35	53	76	93	(NA)	90	87	(X)
	1958..	128	135.3	38	56	77	93	(NA)	92	93	(X)
	1954..	119	159.9	40	59	81	(NA)	(NA)	90	89	(X)
	1947..	132	170.7	33	53	77	(NA)	(NA)	87	87	(X)
	1935..	(NA)	(NA)	31	44	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2299	Textile goods, n.e.c. <sup>33</sup> .....										
	1982..	283	298.2	37	51	64	79	443	99	67	(X)
	1977..	432	231.1	21	35	48	65	(NA)	96	68	(X)
	1972..	338	211.8	25	36	54	72	(NA)	97	77	(X)
23	APPAREL AND OTHER TEXTILE PRODUCTS										
2311	Men's and boys' suits and coats <sup>28</sup> .....										
	1982..	443	3 061.5	25	37	57	75	261	92	93	(X)
	1977..	619	2 767.5	21	32	48	67	(NA)	93	92	(X)
	1972..	721	2 396.9	19	31	48	65	(NA)	93	96	(X)
	1970..	(NA)	1 912.4	19	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	904	1 912.1	17	27	43	59	(NA)	94	97	(X)
	1966..	(NA)	1 849.5	17	26	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963..	1 031	1 526.0	14	23	38	56	(NA)	93	97	(X)
	1958..	1 275	1 260.9	11	19	32	49	(NA)	91	97	(X)
	1954..	1 255	1 140.7	11	18	31	(NA)	(NA)	91	96	(X)
	1947..	1 761	1 412.8	9	15	26	(NA)	(NA)	92	97	(X)
2321	Men's and boys' shirts and nightwear <sup>28</sup> .....										
	1982..	535	3 477.7	19	29	48	69	182	88	73	(X)
	<sup>34</sup> 1977..	669	2 934.6	17	28	48	65	(NA)	92	92	(X)
	1972..	516	2 104.3	22	31	50	69	(NA)	91	83	(X)
	1970..	(NA)	1 679.4	28	40	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	570	1 448.2	23	33	50	67	(NA)	90	82	(X)
	1966..	(NA)	1 348.1	25	36	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963..	659	1 295.1	22	32	49	67	(NA)	86	83	(X)
	1958..	737	942.1	16	26	41	59	(NA)	90	82	(X)
	1954..	838	894.0	17	26	40	(NA)	(NA)	91	85	(X)
	1947..	922	731.3	19	29	43	(NA)	(NA)	94	87	(X)
2322	Men's and boys' underwear <sup>28</sup> .....										
	1982..	61	429.4	64	81	95	99+	1 485	95	37	(X)
	<sup>34</sup> 1977..	56	419.8	61	82	95	99+	(NA)	87	91	(X)
	1972..	67	239.3	49	71	91	99+	(NA)	94	34	(X)
	1970..	(NA)	160.9	54	70	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967..	71	180.2	43	60	87	99	(NA)	94	37	(X)
	1966..	(NA)	181.6	42	57	(NA)	(NA)	(NA)	(NA)	(NA)	8
	1963..	65	134.9	42	59	86	99	(NA)	89	31	(X)
	1958..	79	100.2	30	46	79	88	(NA)	86	30	(X)
	1954..	72	74.3	43	56	85	(NA)	(NA)	88	28	(X)
	1947..	94	49.8	47	59	80	(NA)	(NA)	95	21	(X)
2323	Men's and boys' neckwear <sup>28</sup> .....										
	1982..	165	335.0	26	38	58	83	311	97	99	(X)
	1977..	199	223.8	27	39	58	84	(NA)	100	97	(X)
	1972..	291	294.9	26	36	53	74	(NA)	99	94	(X)
	1970..	(NA)	205.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	9
	1967..	296	144.7	23	32	48	70	(NA)	98	96	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.										
2323	Men's and boys' neckwear <sup>28</sup> —Con.	1966... (NA)	(157.7)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	10
		1963... 341	121.3	19	28	43	65	(NA)	98	98	(X)
		1958... 362	95.4	17	24	39	59	(NA)	97	98	(X)
		1954... 403	100.0	16	24	41	(NA)	(NA)	98	92	(X)
		1947... 408	113.7	20	29	46	(NA)	(NA)	97	93	(X)
2327	Men's and boys' separate trousers <sup>28</sup> -----	1982... 269	2 165.4	30	45	64	83	342	86	88	(X)
		1977... 404	1 718.0	25	40	59	77	(NA)	84	88	(X)
		1972... 463	1 745.0	29	41	60	76	(NA)	87	88	(X)
		1970... (NA)	1 415.6	26	34	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 579	1 132.4	20	30	46	64	(NA)	89	82	(X)
		1966... (NA)	1 041.6	20	29	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1963... 667	824.2	16	25	40	58	(NA)	85	81	(X)
		1958... 720	442.1	9	17	30	50	(NA)	89	71	(X)
		1954... 768	397.7	12	19	33	(NA)	(NA)	89	75	(X)
		1947... 956	334.0	12	18	29	(NA)	(NA)	86	70	(X)
2328	Men's and boys' work clothing-----	1982... 305	4 661.2	50	59	73	88	864	85	94	(X)
		1977... 347	3 641.9	49	60	73	86	(NA)	89	94	(X)
		1972... 297	1 738.0	38	53	70	84	(NA)	85	89	(X)
		1970... (NA)	1 367.5	40	53	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 277	1 155.0	32	45	64	81	(NA)	84	90	(X)
		1966... (NA)	1 051.7	28	42	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 301	824.7	27	40	59	79	(NA)	82	91	(X)
2329	Men's and boys' clothing, n.e.c.-----	1982... 575	1 658.3	12	20	38	62	102	84	67	(X)
		34 1977... 553	1 065.1	12	22	38	59	(NA)	83	80	(X)
		1972... 481	783.2	20	27	41	63	(NA)	90	61	(X)
		1970... (NA)	649.1	18	25	(NA)	(NA)	(NA)	(NA)	(NA)	5
		1967... 517	677.7	23	30	44	61	(NA)	80	61	(X)
		1966... (NA)	623.0	28	37	(NA)	(NA)	(NA)	(NA)	(NA)	5
		1963... 529	397.6	13	19	32	51	(NA)	85	50	(X)
2331	Women's and misses' blouses <sup>27 28</sup> -----	1982... 1 824	3 884.2	8	14	27	44	49	84	75	(X)
		34 1977... 1 292	2 333.6	12	18	30	47	(NA)	85	75	(X)
		1972... 890	1 254.9	18	26	38	55	(NA)	83	74	(X)
		1970... (NA)	929.9	22	29	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967... 921	727.0	15	24	37	53	(NA)	84	75	(X)
		1966... (NA)	797.1	19	25	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1963... 1 130	610.2	11	15	27	44	(NA)	88	74	(X)
		1958... 1 222	414.6	10	14	24	39	(NA)	89	78	(X)
		1954... 1 233	375.3	11	16	25	(NA)	(NA)	93	85	(X)
		1947... 1 356	276.6	7	11	20	(NA)	(NA)	93	88	(X)
2335	Women's and misses' dresses-----	1982... 5 489	4 623.3	6	10	17	28	24	94	94	(X)
		1977... 6 753	4 188.6	8	12	19	28	(NA)	95	95	(X)
		1972... 5 295	3 580.0	9	13	18	28	(NA)	96	96	(X)
		1970... (NA)	3 365.6	10	13	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967... 5 008	3 086.3	7	9	14	23	(NA)	97	95	(X)
		1966... (NA)	2 507.6	8	10	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 4 577	2 411.0	6	9	14	23	(NA)	97	96	(X)
2337	Women's and misses' suits and coats <sup>28</sup> -----	1982... 1 432	4 886.7	19	28	40	55	136	75	82	(X)
		1977... 1 558	2 912.9	15	20	31	45	(NA)	80	80	(X)
		1972... 1 548	1 805.3	13	18	26	40	(NA)	84	80	(X)
		1970... (NA)	1 605.1	10	14	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967... 2 058	1 776.4	12	15	22	34	(NA)	86	90	(X)
		1966... (NA)	1 779.8	9	13	(NA)	(NA)	(NA)	(NA)	(NA)	5
		1963... 2 481	1 522.7	8	11	17	28	(NA)	89	92	(X)
		1958... 2 651	1 220.2	3	5	11	21	(NA)	93	93	(X)
		1954... 3 178	1 261.3	3	6	11	(NA)	(NA)	94	93	(X)
2339	Women's and misses' outerwear, n.e.c.-----	1982... 1 592	4 830.4	13	22	34	49	86	82	75	(X)
		34 1977... 1 625	3 285.1	14	20	33	50	(NA)	80	81	(X)
		1972... 1 247	1 638.0	18	25	37	52	(NA)	81	62	(X)
		1970... (NA)	1 256.6	22	31	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1967... 1 048	944.3	16	21	33	50	(NA)	77	59	(X)
		1966... (NA)	(960.0)	14	22	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1963... 1 252	786.0	14	22	33	48	(NA)	82	59	(X)
2341	Women's and children's underwear <sup>28</sup> -----	1982... 477	2 602.4	22	31	45	66	203	91	89	(X)
		1977... 548	1 780.8	22	29	43	64	(NA)	95	87	(X)
		1972... 609	1 331.9	15	23	41	63	(NA)	94	88	(X)
		1970... (NA)	1 201.2	16	23	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 778	1 116.8	15	22	37	56	(NA)	94	86	(X)
		1966... (NA)	1 042.2	15	22	(NA)	(NA)	(NA)	(NA)	(NA)	5
		1963... 978	976.1	11	17	31	50	(NA)	94	85	(X)
		1958... 1 170	804.9	8	13	24	41	(NA)	96	83	(X)
		1954... 1 276	770.0	8	13	24	(NA)	(NA)	95	98	(X)
		1947... 1 467	575.8	6	11	19	(NA)	(NA)	(NA)	(NA)	(X)
2342	Brassieres and allied garments <sup>28</sup> -----	1982... 134	720.3	35	56	78	94	486	93	92	(X)
		1977... 150	650.0	36	52	77	92	(NA)	92	99	(X)
		1972... 220	647.0	31	45	67	86	(NA)	96	90	(X)
		1970... (NA)	645.7	30	44	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 254	663.3	30	43	62	81	(NA)	95	97	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.										
2342	Brassieres and allied garments <sup>28</sup> —Con.										
	1966...	(NA)	667.2	33	48	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963...	296	593.9	29	45	64	81	(NA)	96	95	(X)
	1958...	363	462.2	29	43	59	75	(NA)	96	98	(X)
	1954...	424	394.8	26	38	57	(NA)	(NA)	96	(NA)	(X)
	1947...	493	277.8	16	30	47	(NA)	(NA)	(NA)	(NA)	(X)
2351	Millinery <sup>28</sup> -----										
	1982...	105	89.9	24	37	60	89	293	96	97	(X)
	1977...	151	75.1	19	28	48	79	(NA)	99	(D)	(X)
	1972...	215	58.1	17	26	44	68	(NA)	99	96	(X)
	1970...	(NA)	64.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	14
	1967...	477	112.4	12	17	27	45	(NA)	99	98	(X)
	1966...	(NA)	(115.4)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	20
	1963...	710	163.2	9	14	22	36	(NA)	100	100	(X)
	1958...	801	188.3	6	10	19	33	(NA)	100	99	(X)
	1954...	865	173.1	7	12	20	(NA)	(NA)	99	98	(X)
	1947...	927	177.7	7	10	18	(NA)	(NA)	99	98	(X)
2352	Hats and caps, except millinery <sup>28</sup> -----										
	1982...	285	432.4	25	39	58	78	261	98	98	(X)
	1977...	230	284.8	27	43	63	83	(NA)	96	94	(X)
	1972...	253	171.0	26	39	57	77	(NA)	96	99	(X)
	1970...	(NA)	169.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967...	340	194.5	32	41	58	75	(NA)	99	99	(X)
	1966...	(NA)	(148.3)	36	47	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963...	413	171.1	31	40	52	69	(NA)	98	98	(X)
	35 1958...	(NA)	163.7	28	36	(NA)	(NA)	(NA)	98	98	(X)
2361	Children's dresses and blouses -----										
	1982...	490	1 417.7	17	26	43	64	162	90	84	(X)
	34 1977...	455	824.7	15	23	41	64	(NA)	89	87	(X)
	1972...	439	655.2	17	26	42	63	(NA)	89	86	(X)
	1970...	(NA)	486.9	14	21	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967...	575	496.0	14	19	32	53	(NA)	92	82	(X)
	1966...	(NA)	492.7	14	21	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963...	627	433.3	12	20	34	54	(NA)	91	32	(X)
2363	Children's coats and suits <sup>28</sup> -----										
	1982...	71	191.3	46	66	87	98	730	92	83	(X)
	1977...	108	173.8	32	47	72	92	(NA)	87	78	(X)
	1972...	155	188.5	18	31	55	83	(NA)	91	85	(X)
	1970...	(NA)	163.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1967...	216	175.3	18	31	52	76	(NA)	93	84	(X)
	1966...	(NA)	185.4	15	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	9
	1963...	269	162.9	14	24	43	67	(NA)	92	86	(X)
	1958...	361	163.7	11	19	35	58	(NA)	93	83	(X)
	1954...	400	172.1	14	22	35	(NA)	(NA)	91	81	(X)
2369	Children's outerwear, n.e.c. -----										
	1982...	279	1 102.4	32	42	61	81	389	85	74	(X)
	34 1977...	307	718.8	24	36	57	76	(NA)	84	77	(X)
	1972...	370	578.2	22	32	48	69	(NA)	85	70	(X)
	1970...	(NA)	476.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967...	456	456.2	20	30	45	64	(NA)	80	68	(X)
	1966...	(NA)	438.1	18	26	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963...	602	419.6	16	23	35	54	(NA)	81	69	(X)
2371	Fur goods <sup>28</sup> -----										
	1982...	503	419.3	12	19	33	55	83	100	99	(X)
	1977...	620	383.4	11	19	31	51	(NA)	100	99	(X)
	1972...	797	220.0	7	12	23	39	(NA)	99	99	(X)
	1970...	(NA)	271.4	6	10	(NA)	(NA)	(NA)	(NA)	(NA)	14
	1967...	1 304	333.2	5	8	15	27	(NA)	99	100	(X)
	1966...	(NA)	365.1	4	7	(NA)	(NA)	(NA)	(NA)	(NA)	11
	1963...	1 591	334.4	5	8	15	26	(NA)	99	100	(X)
	1958...	1 651	275.3	5	8	14	25	(NA)	99	100	(X)
	1954...	1 972	227.5	4	6	11	(NA)	(NA)	99	100	(X)
	1947...	2 227	357.0	3	5	9	(NA)	(NA)	100	100	(X)
	1935...	(NA)	(NA)	2	4	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2381	Fabric dress and work gloves <sup>28</sup> -----										
	1982...	78	208.4	46	65	84	98	752	89	73	(X)
	1977...	100	312.4	44	63	82	96	(NA)	91	84	(X)
	1972...	106	198.8	41	59	80	95	(NA)	93	86	(X)
	1970...	(NA)	185.4	35	53	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967...	140	176.6	33	49	72	92	(NA)	91	87	(X)
	1966...	(NA)	(205.9)	27	40	(NA)	(NA)	(NA)	(NA)	(NA)	21
	1963...	170	149.5	31	45	69	88	(NA)	94	82	(X)
	36 1958...	189	112.1	30	46	(NA)	(NA)	(NA)	94	84	(X)
2384	Robes and dressing gowns <sup>28</sup> -----										
	1982...	129	403.6	25	42	70	92	328	94	81	(X)
	1977...	137	288.3	25	44	69	90	(NA)	89	93	(X)
	1972...	172	202.8	24	39	59	83	(NA)	93	97	(X)
	1970...	(NA)	198.8	20	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967...	237	200.2	16	27	49	77	(NA)	96	95	(X)
	1966...	(NA)	(198.3)	20	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	16
	1963...	268	173.5	17	28	48	75	(NA)	96	94	(X)
	1958...	278	132.5	14	23	43	68	(NA)	93	96	(X)
	1954...	322	108.0	15	25	45	(NA)	(NA)	93	84	(X)
	1947...	370	103.0	10	19	38	(NA)	(NA)	89	82	(X)
2385	Waterproof outer garments <sup>28</sup> -----										
	1982...	98	449.2	49	64	84	97	921	89	88	(X)
	1977...	157	348.8	41	52	70	90	(NA)	91	90	(X)
	1972...	236	332.1	31	40	56	79	(NA)	97	94	(X)
	1970...	(NA)	345.0	30	40	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967...	299	371.9	24	34	51	73	(NA)	95	93	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.										
2385	Waterproof outer garments <sup>28</sup> —Con.										
	1966..	(NA)	305.7	24	33	(NA)	(NA)	(NA)	(NA)	(NA)	9
	1963..	223	235.5	19	28	45	68	(NA)	92	93	(X)
	1958..	272	146.3	20	29	49	74	(NA)	(NA)	90	(X)
	1954..	291	119.7	20	30	50	(NA)	(NA)	89	81	(X)
	1947..	245	80.8	23	37	55	(NA)	(NA)	85	73	(X)
2386	Leather and sheep lined clothing <sup>28</sup> -----										
	1982..	186	221.3	32	47	69	88	386	92	94	(X)
	1977..	236	214.1	16	28	50	78	(NA)	97	91	(X)
	1972..	185	172.1	19	32	57	82	(NA)	94	87	(X)
	1970..	(NA)	140.8	(S)	27	(NA)	(NA)	(NA)	(NA)	(NA)	14
	1967..	135	98.8	24	37	61	87	(NA)	97	86	(X)
	1966..	(NA)	(84.0)	24	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	15
	1963..	114	56.4	28	43	66	92	(NA)	97	83	(X)
	1958..	154	64.3	18	30	52	81	(NA)	94	91	(X)
	1954..	153	56.4	18	31	53	(NA)	(NA)	85	80	(X)
	1947..	125	40.6	24	39	67	(NA)	(NA)	79	80	(X)
2387	Apparel belts <sup>28</sup> -----										
	1982..	317	556.5	19	30	50	70	191	89	95	(X)
	1977..	281	286.9	21	32	51	71	(NA)	88	96	(X)
	1972..	292	257.5	21	32	51	72	(NA)	94	97	(X)
	1970..	(NA)	168.0	30	44	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967..	274	130.2	28	38	55	73	(NA)	89	98	(X)
	1966..	(NA)	121.4	28	38	(NA)	(NA)	(NA)	(NA)	(NA)	7
	1963..	388	108.6	23	30	43	62	(NA)	91	94	(X)
	1958..	458	93.8	21	27	36	54	(NA)	92	95	(X)
	1954..	501	106.3	19	25	36	(NA)	(NA)	92	94	(X)
	1947..	390	69.0	23	31	44	(NA)	(NA)	90	95	(X)
2389	Apparel and accessories, n.e.c.-----										
	1982..	362	279.2	30	43	57	74	321	91	91	(X)
	1977..	304	199.0	31	45	62	78	(NA)	90	95	(X)
	1972..	238	116.8	24	37	57	77	(NA)	97	84	(X)
	1970..	(NA)	139.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	7
	1967..	243	119.5	18	30	52	76	(NA)	96	85	(X)
	1966..	(NA)	116.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	10
	1963..	265	98.2	19	31	50	74	(NA)	93	82	(X)
2391	Curtains and draperies-----										
	1982..	1 328	1 062.0	22	35	48	61	191	94	91	(X)
	1977..	1 650	1 013.1	26	36	49	62	(NA)	95	93	(X)
	1972..	1 539	754.9	35	43	52	64	(NA)	93	93	(X)
	1970..	(NA)	558.0	33	40	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967..	1 393	418.7	27	39	50	63	(NA)	97	95	(X)
	1966..	(NA)	(416.2)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	17
	<sup>37</sup> 1963..	1 092	313.0	21	33	45	60	(NA)	95	95	(X)
	1958..	757	206.5	26	34	45	61	(NA)	92	92	(X)
	1954..	697	172.7	20	28	42	(NA)	(NA)	94	89	(X)
	1947..	379	109.6	18	29	49	(NA)	(NA)	97	90	(X)
2392	House furnishings, n.e.c.-----										
	1982..	880	3 262.2	23	33	49	65	189	92	63	(X)
	1977..	980	2 294.0	22	33	48	66	(NA)	89	61	(X)
	1972..	1 059	1 526.9	22	30	43	60	(NA)	86	58	(X)
	1970..	(NA)	1 272.1	21	27	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967..	1 189	962.8	21	28	41	56	(NA)	88	52	(X)
	1966..	(NA)	903.8	20	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963..	1 205	716.7	18	24	35	50	(NA)	88	50	(X)
	1958..	1 181	591.5	18	25	39	52	(NA)	89	60	(X)
	1954..	1 203	503.2	21	29	42	(NA)	(NA)	91	59	(X)
	1947..	1 209	502.5	33	44	58	(NA)	(NA)	93	87	(X)
2393	Textile bags-----										
	1982..	233	421.8	18	29	47	74	171	88	83	(X)
	1977..	211	321.8	27	39	57	83	(NA)	82	84	(X)
	1972..	188	255.1	27	42	61	84	(NA)	93	90	(X)
	1970..	(NA)	231.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967..	177	291.1	31	50	72	89	(NA)	94	89	(X)
	1966..	(NA)	205.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	13
	1963..	175	200.4	38	51	68	87	(NA)	88	85	(X)
	1958..	217	186.3	40	51	66	85	(NA)	86	87	(X)
	1954..	235	221.0	45	56	70	(NA)	(NA)	84	85	(X)
	1947..	198	356.0	53	63	77	(NA)	(NA)	93	98	(X)
2394	Canvas and related products-----										
	1982..	1 108	752.3	21	29	40	52	172	94	93	(X)
	1977..	987	486.8	17	26	40	56	(NA)	93	92	(X)
	1972..	845	276.4	23	29	40	55	(NA)	95	88	(X)
	1970..	(NA)	242.4	19	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1967..	846	273.6	20	30	43	62	(NA)	94	95	(X)
	1966..	(NA)	225.3	19	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	8
	1963..	869	166.4	18	25	37	54	(NA)	92	91	(X)
	1958..	846	119.0	14	22	34	49	(NA)	90	90	(X)
	1954..	1 100	129.6	14	19	31	(NA)	(NA)	89	86	(X)
	1947..	889	91.1	10	17	31	(NA)	(NA)	91	93	(X)
2395	Pleating and stitching-----										
	1982..	906	873.1	24	33	47	60	220	98	91	(X)
	1977..	770	620.2	25	34	46	61	(NA)	96	98	(X)
	1972..	895	308.2	22	31	45	61	(NA)	88	98	(X)
	1970..	(NA)	150.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	9
	1967..	1 104	139.3	7	12	22	38	(NA)	97	95	(X)
	1966..	(NA)	(123.0)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	17
	1963..	1 315	150.2	9	13	20	32	(NA)	97	98	(X)

See footnotes at end of table.



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[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>		Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>5</sup>	Primary product speciali- zation ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
				Total (million dollars)	Percent accounted for by <sup>4</sup> —						
					4 largest companies	8 largest companies	20 largest companies	50 largest companies			
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.										
2396	Automotive and apparel trimmings -----	1982... 803	2 130.2	(D)	70	77	83	1 734	99	99	(X)
		1977... 686	2 166.3	71	77	83	88	(NA)	98	96	(X)
		1972... 644	1 133.0	67	74	80	85	(NA)	98	95	(X)
		1970... (NA)	918.8	47	55	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1967... 762	777.4	57	63	70	78	(NA)	98	93	(X)
		1966... (NA)	741.8	58	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1963... 746	570.6	58	63	71	79	(NA)	98	97	(X)
2397	Schiffli machine embroideries -----	1982... 356	303.3	22	32	48	66	183	95	96	(X)
		1977... 357	158.0	26	36	50	67	(NA)	97	98	(X)
		1972... 446	120.5	19	28	42	58	(NA)	96	99	(X)
		1970... (NA)	92.1	13	19	(NA)	(NA)	(NA)	(NA)	(NA)	14
		1967... 605	99.6	13	21	34	52	(NA)	98	99	(X)
		1966... (NA)	94.8	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	13
		1963... 755	97.4	13	21	33	49	(NA)	96	99	(X)
		1958... 706	74.8	11	15	26	39	(NA)	99	98	(X)
		1954... 601	65.8	15	21	32	(NA)	(NA)	98	99	(X)
		1947... 542	55.5	17	23	36	(NA)	(NA)	98	96	(X)
2399	Fabricated textile products, n.e.c. -----	1982... 770	1 475.9	18	30	50	68	168	93	91	(X)
		1977... 845	1 152.9	26	37	52	67	(NA)	94	89	(X)
		1972... 797	724.7	23	34	51	69	(NA)	89	82	(X)
		1970... (NA)	784.6	32	39	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967... 799	535.1	19	30	49	70	(NA)	89	83	(X)
		1966... (NA)	477.4	16	28	(NA)	(NA)	(NA)	(NA)	(NA)	10
		1963... 1 027	342.5	14	22	40	59	(NA)	86	75	(X)
24	LUMBER AND WOOD PRODUCTS										
2411	Logging camps and logging contractors <sup>38</sup> -----	1982... 11 541	8 274.0	30	37	47	52	395	96	95	(X)
		1977... 15 344	6 230.1	29	36	45	50	(NA)	97	94	(X)
		1972... 13 152	2 529.5	18	25	35	41	(NA)	97	89	(X)
		1970... (NA)	1 838.8	19	27	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967... 16 265	1 476.3	14	22	30	35	(NA)	98	91	(X)
		1966... (NA)	1 361.8	14	23	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 13 522	<sup>381</sup> 154.7	11	19	25	31	(NA)	99	90	(X)
		1958... 12 730	833.8	13	19	25	32	(NA)	93	92	(X)
		1954... 12 789	733.4	8	13	20	(NA)	(NA)	98	89	(X)
2421	Sawmills and planing mills, general -----	1982... 5 810	10 065.2	17	23	34	46	113	93	91	(X)
		1977... 6 966	10 866.7	17	23	36	49	(NA)	92	93	(X)
		1972... 7 664	6 420.8	18	23	33	45	(NA)	91	94	(X)
		1970... (NA)	3 935.7	16	20	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 10 016	3 506.4	11	15	22	31	(NA)	92	95	(X)
		1966... (NA)	3 390.8	11	15	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1963... 11 931	3 156.3	11	14	20	29	(NA)	89	95	(X)
2426	Hardwood dimension and flooring <sup>39</sup> -----	1982... 750	912.6	13	19	31	49	90	91	92	(X)
		1977... 845	850.0	16	22	33	51	(NA)	91	92	(X)
		1972... 882	579.0	12	17	28	44	(NA)	91	88	(X)
2429	Special product sawmills, n.e.c. -----	1982... 266	154.6	25	35	53	74	260	96	92	(X)
		1977... 522	252.6	11	19	36	57	(NA)	98	92	(X)
		1972... 397	180.8	26	38	51	69	(NA)	98	96	(X)
		1970... (NA)	118.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	18
		1967... 454	117.9	21	30	43	63	(NA)	98	95	(X)
		1966... (NA)	(109.7)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	14
		1963... 476	96.0	17	25	41	62	(NA)	98	<sup>40</sup> 49	(X)
2431	Millwork <sup>41</sup> -----	1982... 2 192	4 248.3	15	20	30	44	98	93	94	(X)
		1977... 2 209	3 928.1	14	20	31	46	(NA)	94	94	(X)
		1972... 2 340	2 426.8	10	15	25	41	(NA)	94	94	(X)
2434	Wood kitchen cabinets <sup>42</sup> -----	1982... 2 902	2 060.7	12	19	29	40	67	96	97	(X)
		1977... 2 541	1 590.8	14	21	33	44	(NA)	96	96	(X)
		1972... 1 769	897.2	12	19	32	48	(NA)	95	96	(X)
2435	Hardwood veneer and plywood <sup>12</sup> -----	1982... 264	1 304.4	25	39	57	74	251	93	94	(X)
		1977... 274	1 250.4	27	40	60	78	(NA)	91	93	(X)
		1972... 326	911.8	34	43	61	77	(NA)	91	92	(X)
2436	Softwood veneer and plywood <sup>12</sup> -----	1982... 135	3 221.5	41	56	74	92	619	84	94	(X)
		1977... 129	3 804.8	38	53	72	91	(NA)	88	91	(X)
		1972... 121	2 011.5	37	50	67	87	(NA)	88	89	(X)
2439	Structural wood members, n.e.c. <sup>43</sup> -----	1982... 649	847.9	15	22	35	50	104	96	95	(X)
		1977... 620	807.7	16	21	31	48	(NA)	94	93	(X)
		1972... 642	456.0	14	19	31	48	(NA)	95	90	(X)
2441	Nailed wood boxes and shook -----	1982... 335	306.8	21	31	46	65	208	90	81	(X)
		1977... 391	263.3	15	24	42	64	(NA)	89	83	(X)
		1972... 424	237.9	27	34	48	66	(NA)	88	87	(X)
		1970... (NA)	222.8	26	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1967... 567	273.8	24	30	42	60	(NA)	88	87	(X)
		1966... (NA)	268.2	23	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1963... 637	206.0	26	31	41	56	(NA)	85	83	(X)
2448	Wood pallets and skids <sup>44</sup> -----	1982... 1 649	1 012.3	5	8	15	26	17	92	93	(X)
		1977... 1 267	698.0	6	10	18	29	(NA)	90	91	(X)
		1972... 444	295.4	7	11	20	37	(NA)	91	88	(X)

See footnotes at end of table.

Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>5</sup>	Primary product speciali- zation ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
24	LUMBER AND WOOD PRODUCTS—Con.										
2449	Wood containers, n.e.c. <sup>12</sup> ----- 1982-- 216 315.8 24 39 67 88 310 95 97 (X)										
	1977-- 238 255.8 25 38 64 87 (NA) 93 97 (X)										
	1972-- 236 240.2 22 35 60 86 (NA) 94 98 (X)										
2451	Mobile homes <sup>45</sup> ----- 1982-- 261 3 606.4 24 39 61 82 269 99 99 (X)										
	1977-- 308 3 199.3 24 37 58 77 (NA) 99 99 (X)										
	1972-- 352 3 242.9 26 37 56 77 (NA) 99 99 (X)										
2452	Prefabricated wood buildings <sup>46</sup> ----- 1982-- 598 1 349.0 18 27 47 63 150 97 99 (X)										
	1977-- 512 1 948.6 24 36 49 65 (NA) 98 98 (X)										
	1972-- 263 1 046.1 33 40 53 71 (NA) 97 96 (X)										
2491	Wood preserving ----- 1982-- 428 1 360.2 27 37 52 71 350 98 96 (X)										
	1977-- 366 962.6 33 42 59 76 (NA) 97 97 (X)										
	1972-- 309 475.8 36 45 61 80 (NA) 99 96 (X)										
	1970-- (NA) 398.5 34 (S) (NA) (NA) (NA) (NA) 99 (NA) 96 (X)										
	1967-- 278 344.2 35 44 63 84 (NA) 98 98 (X)										
	1966-- (NA) 326.0 37 47 (NA) (NA) (NA) (NA) 98 (NA) 97 (X)										
	1963-- 250 247.3 34 44 64 84 (NA) 98 97 (X)										
	1958-- 211 198.3 32 43 65 87 (NA) 98 96 (X)										
	1954-- 188 190.5 30 42 63 (NA) 97 99 (X)										
	1947-- 136 304.0 31 44 67 (NA) (NA) (D) (D) 97 (D) 99 (X)										
	1935-- (NA) (NA) 50 60 (NA) (NA) (NA) (NA) 98 (NA) 98 (X)										
2492	Particleboard <sup>47</sup> ----- 1982-- 31 547.4 43 69 94 100 709 97 96 (X)										
	1977-- 36 452.9 48 70 95 100 (NA) 99 95 (X)										
	1972-- 39 295.4 48 69 92 100 (NA) 92 94 (X)										
2499	Wood products, n.e.c. <sup>48</sup> ----- 1982-- 3 226 3 347.8 16 23 34 48 118 95 94 (X)										
	1977-- 2 909 2 557.6 18 24 36 50 (NA) 94 93 (X)										
	1972-- 3 009 1 518.9 18 24 33 46 (NA) 93 91 (X)										
25	FURNITURE AND FIXTURES										
2511	Wood household furniture <sup>49</sup> ----- 1982-- 2 430 5 056.6 16 23 37 54 106 95 96 (X)										
	1977-- 2 795 4 148.8 14 23 39 56 (NA) 94 96 (X)										
	1972-- 2 160 2 870.0 14 22 40 60 (NA) 94 95 (X)										
2512	Upholstered household furniture <sup>50</sup> ----- 1982-- 1 129 3 505.3 17 25 39 55 118 91 95 (X)										
	1977-- 1 357 2 931.0 15 23 36 52 (NA) 91 96 (X)										
	1972-- 1 201 2 104.7 14 23 36 51 (NA) 92 95 (X)										
	1970-- (NA) 1 675.3 13 20 (NA) (NA) (NA) (NA) 92 (NA) 95 (X)										
	1967-- 1 582 1 266.4 14 20 31 45 (NA) 93 94 (X)										
	1966-- (NA) 1 265.0 15 21 (NA) (NA) (NA) (NA) 93 (NA) 94 (X)										
	1963-- 1 729 983.2 13 18 28 41 (NA) 92 92 (X)										
2514	Metal household furniture ----- 1982-- 413 1 590.7 16 26 44 69 150 89 92 (X)										
	1977-- 405 1 307.1 13 22 39 67 (NA) 89 91 (X)										
	1972-- 426 890.4 13 24 44 69 (NA) 90 91 (X)										
	1970-- (NA) 714.4 16 28 (NA) (NA) (NA) (NA) 90 (NA) 91 (X)										
	1967-- 464 605.3 14 24 40 63 (NA) 90 90 (X)										
	1966-- (NA) 595.3 13 23 (NA) (NA) (NA) (NA) 90 (NA) 90 (X)										
	1963-- 508 524.3 13 20 34 59 (NA) 88 89 (X)										
	1958-- 614 489.7 14 22 38 58 (NA) 88 88 (X)										
	1954-- 635 402.6 16 26 43 (NA) 87 83 (X)										
	1947-- 305 194.9 26 37 56 (NA) 83 73 (X)										
2515	Mattresses and bedsprings ----- 1982-- 786 1 935.4 23 31 43 57 211 95 88 (X)										
	1977-- 832 1 398.5 21 31 43 58 (NA) 95 86 (X)										
	1972-- 888 1 041.7 24 31 43 57 (NA) 94 88 (X)										
	1970-- (NA) 848.4 27 33 (NA) (NA) (NA) (NA) 91 (NA) 91 (X)										
	1967-- 939 745.1 26 34 44 58 (NA) 91 91 (X)										
	1966-- (NA) 735.6 27 33 (NA) (NA) (NA) (NA) 91 (NA) 91 (X)										
	1963-- 1 066 641.0 26 31 41 54 (NA) 90 90 (X)										
2517	Wood TV and radio cabinets <sup>51</sup> ----- 1982-- 81 306.6 57 77 92 99 1 049 91 91 (X)										
	1977-- 91 304.8 45 75 88 98 (NA) 92 90 (X)										
	1972-- 95 330.2 42 64 86 98 (NA) 85 91 (X)										
2519	Household furniture, n.e.c. ----- 1982-- 196 381.1 45 57 75 91 718 80 93 (X)										
	1977-- 198 301.9 39 51 73 90 (NA) 79 84 (X)										
	1972-- 157 172.6 19 34 64 87 (NA) 84 73 (X)										
	1970-- (NA) 54.1 (S) (S) (NA) (NA) 84 (NA) 73 (X)										
	1967-- 75 55.3 36 53 82 98 (NA) 83 56 (X)										
	1966-- (NA) (78.2) (S) (S) (NA) (NA) 83 (NA) 56 (X)										
	1963-- 72 28.9 34 50 78 98 (NA) 84 51 (X)										
	1958-- 92 30.3 43 57 77 96 (NA) 88 68 (X)										
	1954-- 69 15.6 50 65 85 (NA) 86 59 (X)										
2521	Wood office furniture ----- 1982-- 430 1 087.4 22 32 50 71 199 91 84 (X)										
	1977-- 319 612.0 32 44 62 81 (NA) 85 90 (X)										
	1972-- 232 249.7 25 38 60 80 (NA) 90 84 (X)										
	1970-- (NA) 198.5 34 52 (NA) (NA) 88 (NA) 84 (X)										
	1967-- 172 158.3 29 48 71 88 (NA) 89 86 (X)										

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
25	FURNITURE AND FIXTURES—Con.										
2521	Wood office furniture—Con.										
	1966...	(NA)	136.4	30	50	(NA)	(NA)	(NA)	(NA)	3	
	1963...	131	101.5	29	47	74	92	(NA)	90	(X)	
	1958...	147	66.2	27	42	68	87	(NA)	89	(X)	
	1954...	111	52.7	25	41	69	(NA)	(NA)	86	(X)	
	1947...	114	47.5	21	34	65	(NA)	(NA)	92	(X)	
2522	Metal office furniture-----	1982...	224	3 062.7	45	59	75	89	900	90	(X)
		1977...	167	1 397.4	47	59	78	93	(NA)	94	(X)
		1972...	166	861.5	42	54	76	93	(NA)	90	(X)
		1970...	(NA)	677.7	41	55	(NA)	(NA)	(NA)	(NA)	1
		1967...	166	622.9	38	52	75	92	(NA)	89	(X)
		1966...	(NA)	596.0	37	51	(NA)	(NA)	(NA)	(NA)	4
		1963...	153	390.0	33	50	75	93	(NA)	87	(X)
		1958...	142	271.8	38	56	80	94	(NA)	88	(X)
		1954...	122	202.9	46	63	83	(NA)	(NA)	84	(X)
		1947...	100	125.7	50	66	87	(NA)	(NA)	89	(X)
2531	Public building and related furniture -----	1982...	394	1 102.8	23	33	51	71	206	84	(X)
		1977...	401	787.4	23	32	50	71	(NA)	88	(X)
		1972...	405	523.6	22	32	47	67	(NA)	86	(X)
		1970...	(NA)	461.7	23	36	(NA)	(NA)	(NA)	(NA)	3
		1967...	428	421.2	23	36	54	72	(NA)	84	(X)
		1966...	(NA)	343.5	24	37	(NA)	(NA)	(NA)	(NA)	9
		1963...	424	268.6	24	35	50	69	(NA)	85	(X)
		1958...	383	204.6	27	37	53	71	(NA)	88	(X)
		1954...	291	159.5	32	43	61	(NA)	(NA)	83	(X)
2541	Wood partitions and fixtures-----	1982...	1 547	1 766.7	8	12	22	38	39	92	(X)
		1977...	1 572	1 105.8	6	11	20	34	(NA)	92	(X)
		1972...	1 475	793.2	5	9	18	32	(NA)	92	(X)
		1970...	(NA)	612.5	9	13	(NA)	(NA)	(NA)	(NA)	3
		1967...	1 463	498.6	6	10	20	36	(NA)	93	(X)
		1966...	(NA)	452.0	4	8	(NA)	(NA)	(NA)	(NA)	6
		1963...	1 588	389.6	4	8	15	27	(NA)	94	(X)
2542	Metal partitions and fixtures -----	1982...	533	1 943.2	14	23	40	60	113	89	(X)
		1977...	508	1 303.0	16	24	41	62	(NA)	89	(X)
		1972...	482	734.5	16	25	44	65	(NA)	90	(X)
		1970...	(NA)	575.8	19	30	(NA)	(NA)	(NA)	(NA)	3
		1967...	491	512.0	24	33	51	70	(NA)	90	(X)
		1966...	(NA)	520.1	22	33	(NA)	(NA)	(NA)	(NA)	14
		1963...	502	337.8	23	33	50	70	(NA)	83	(X)
2591	Drapery hardware and blinds and shades -----	1982...	404	1 114.4	43	62	75	85	661	97	(X)
		1977...	435	675.1	46	65	81	89	(NA)	95	(X)
		1972...	493	364.5	50	67	78	86	(NA)	90	(X)
		1970...	(NA)	298.1	42	59	(NA)	(NA)	(NA)	(NA)	3
		1967...	581	246.8	41	57	74	83	(NA)	89	(X)
		1966...	(NA)	229.0	41	57	(NA)	(NA)	(NA)	(NA)	8
		1963...	695	199.6	37	54	71	79	(NA)	89	(X)
		1958...	826	166.6	32	45	(NA)	(NA)	(NA)	(NA)	(X)
2599	Furniture and fixtures, n.e.c.-----	1982...	819	1 275.7	19	28	42	59	156	90	(X)
		1977...	528	705.2	19	27	40	59	(NA)	87	(X)
		1972...	477	372.0	13	23	39	59	(NA)	87	(X)
		1970...	(NA)	210.3	16	26	(NA)	(NA)	(NA)	(NA)	7
		1967...	317	179.0	18	28	43	65	(NA)	87	(X)
		1966...	(NA)	152.5	18	28	(NA)	(NA)	(NA)	(NA)	13
		1963...	354	121.6	16	27	42	64	(NA)	86	(X)
26	PAPER AND ALLIED PRODUCTS										
2611	Pulp mills <sup>52</sup> -----	1982...	29	3 110.4	45	70	99	100	760	85	(X)
		1977...	26	2 091.1	48	76	99	100	(NA)	86	(X)
		1972...	46	709.9	59	83	99	100	(NA)	95	(X)
		1970...	(NA)	960.3	48	76	(NA)	(NA)	(NA)	(NA)	1
		1967...	45	730.5	45	70	97	100	(NA)	88	(X)
		1966...	(NA)	725.5	48	75	(NA)	(NA)	(NA)	(NA)	2
		1963...	34	609.1	48	72	97	100	(NA)	88	(X)
		1958...	49	452.0	46	68	94	100	(NA)	98	(X)
2621	Paper mills, except building paper-----	1982...	135	20 994.6	22	40	71	93	311	92	(X)
		1977...	171	12 613.3	23	42	70	92	(NA)	92	(X)
		1972...	194	6 385.2	24	40	66	88	(NA)	91	(X)
		1970...	(NA)	5 674.0	26	43	(NA)	(NA)	(NA)	(NA)	1
		1967...	203	4 844.0	26	43	65	86	(NA)	92	(X)
		1966...	(NA)	4 804.8	24	40	(NA)	(NA)	(NA)	(NA)	2
		1963...	186	3 824.9	26	42	63	85	(NA)	90	(X)
2631	Paperboard mills -----	1982...	106	9 531.1	28	45	75	96	401	89	(X)
		1977...	120	7 124.3	27	42	70	95	(NA)	84	(X)
		1972...	135	4 153.5	29	44	69	93	(NA)	83	(X)
		1970...	(NA)	3 388.6	28	44	(NA)	(NA)	(NA)	(NA)	1
		1967...	148	2 907.0	27	42	67	92	(NA)	84	(X)
		1966...	(NA)	2 853.4	27	42	(NA)	(NA)	(NA)	(NA)	1
		1963...	146	2 315.2	27	43	67	90	(NA)	85	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
26	PAPER AND ALLIED PRODUCTS—Con.										
2641	Paper coating and glazing.....	1982... 499	5 454.0	32	46	62	78	416	79	84	(X)
		1977... 454	3 392.0	30	45	64	82	(NA)	80	86	(X)
		1972... 366	1 954.0	36	49	67	84	(NA)	76	86	(X)
		1970... (NA)	1 724.6	37	48	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 334	1 566.5	38	49	68	85	(NA)	79	87	(X)
		1966... (NA)	1 383.5	28	39	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 323	1 161.6	30	43	64	85	(NA)	82	78	(X)
2642	Envelopes.....	1982... 196	1 771.3	28	46	67	85	337	98	94	(X)
		1977... 182	990.5	28	44	66	86	(NA)	97	93	(X)
		1972... 178	620.8	31	45	65	84	(NA)	96	95	(X)
		1970... (NA)	572.9	31	44	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967... 172	470.3	32	44	63	84	(NA)	95	96	(X)
		1966... (NA)	446.3	32	44	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 180	363.3	32	42	59	82	(NA)	94	96	(X)
		1958... 173	258.9	30	41	58	81	(NA)	93	94	(X)
		1954... 170	195.3	27	37	54	(NA)	(NA)	96	92	(X)
		1947... 142	128.3	30	40	58	(NA)	(NA)	92	95	(X)
		1935... (NA)	(NA)	33	42	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
2643	Bags, except textile bags.....	1982... 448	5 037.6	25	38	59	76	272	89	92	(X)
		1977... 462	3 482.3	26	40	58	75	(NA)	88	90	(X)
		1972... 466	1 885.7	25	41	61	78	(NA)	88	88	(X)
		1970... (NA)	1 702.7	25	40	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967... 466	1 375.6	23	38	59	76	(NA)	86	88	(X)
		1966... (NA)	1 358.5	23	37	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 495	1 061.7	22	36	58	76	(NA)	86	88	(X)
2645	Die-cut paper and board.....	1982... 358	1 680.1	40	50	65	82	522	91	91	(X)
		1977... 316	1 057.7	43	55	71	85	(NA)	88	84	(X)
		1972... 310	676.3	43	54	69	86	(NA)	89	89	(X)
		1970... (NA)	597.0	37	45	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 368	577.5	37	47	62	80	(NA)	86	86	(X)
		1966... (NA)	512.5	31	43	(NA)	(NA)	(NA)	(NA)	(NA)	5
		1963... 370	378.3	36	47	62	79	(NA)	88	82	(X)
2646	Pressed and molded pulp goods.....	1982... 23	236.2	93	98	(D)	(D)	(X)	100	97	(X)
		1977... 25	240.3	87	94	99+	100	(NA)	98	99	(X)
		1972... 32	162.8	75	89	99	100	(NA)	98	97	(X)
		1970... (NA)	160.1	73	90	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967... 43	145.9	71	87	96	100	(NA)	5395	5395	(X)
		1966... (NA)	151.5	73	89	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 43	110.1	72	88	96	100	(NA)	99	96	(X)
		1958... 46	78.2	69	89	98	100	(NA)	99	96	(X)
		1954... 26	42.3	72	94	99+	100	(NA)	100	93	(X)
		1947... 19	16.2	86	97	100	(X)	(NA)	95	86	(X)
2647	Sanitary paper products <sup>9</sup> .....	1982... 84	9 086.0	62	81	97	99+	1 328	94	98	(X)
		1977... 72	4 921.2	65	84	96	99+	(NA)	93	99	(X)
		1972... 72	2 071.8	63	82	95	99+	(NA)	95	97	(X)
		1970... (NA)	1 659.1	63	81	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 91	1 293.4	63	79	92	99	(NA)	94	96	(X)
		1966... (NA)	1 185.8	64	80	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 97	983.0	62	76	90	99	(NA)	93	97	(X)
2648	Stationery products <sup>54</sup> .....	1982... 194	1 034.0	39	49	69	87	780	79	73	(X)
		1977... 219	651.7	38	50	69	88	(NA)	86	80	(X)
		1972... 405	450.5	34	45	63	79	(NA)	85	82	(X)
2649	Converted paper products, n.e.c. <sup>55</sup> .....	1982... 719	2 401.5	16	25	42	59	122	86	80	(X)
		1977... 783	1 697.5	17	25	38	58	(NA)	88	81	(X)
		1972... 287	630.6	22	32	52	72	(NA)	83	74	(X)
2651	Folding paperboard boxes.....	1982... 457	3 901.8	22	35	53	70	212	88	90	(X)
		1977... 452	2 579.0	22	35	56	74	(NA)	87	91	(X)
		1972... 443	1 487.0	23	35	53	70	(NA)	85	91	(X)
		1970... (NA)	1 361.2	22	36	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 476	1 216.2	22	36	54	70	(NA)	84	90	(X)
		1966... (NA)	1 289.5	22	35	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 534	1 081.1	21	37	55	69	(NA)	85	88	(X)
2652	Set-up paperboard boxes.....	1982... 241	433.2	15	26	43	65	132	96	83	(X)
		1977... 280	360.5	12	21	37	58	(NA)	93	87	(X)
		1972... 366	321.3	11	17	31	52	(NA)	94	86	(X)
		1970... (NA)	324.6	12	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	8
		1967... 418	282.4	12	19	32	50	(NA)	92	87	(X)
		1966... (NA)	256.6	12	20	(NA)	(NA)	(NA)	(NA)	(NA)	12
		1963... 474	225.8	12	19	30	48	(NA)	91	87	(X)
2653	Corrugated and solid fiber boxes.....	1982... 906	10 558.1	19	33	58	73	207	99	99	(X)
		1977... 863	7 351.1	19	33	58	75	(NA)	99	99	(X)
		1972... 709	4 308.8	18	32	58	76	(NA)	98	99	(X)
		1970... (NA)	3 508.3	19	33	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 568	2 959.6	18	33	61	78	(NA)	98	98	(X)
		1966... (NA)	2 891.2	18	33	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 534	2 166.1	20	36	63	79	(NA)	97	96	(X)
2654	Sanitary food containers.....	1982... 90	2 825.8	51	68	89	99	819	83	86	(X)
		1977... 122	2 048.4	48	68	87	96	(NA)	87	86	(X)
		1972... 160	1 419.7	46	64	85	95	(NA)	91	87	(X)
		1970... (NA)	1 226.4	50	69	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 144	1 093.9	49	68	88	96	(NA)	92	86	(X)
		1966... (NA)	964.1	53	74	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 98	905.9	52	74	91	98	(NA)	92	92	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>		Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)		
				Total (million dollars)	Percent accounted for by <sup>4</sup> —								
					4 largest companies	8 largest companies	20 largest companies	50 largest companies					
26	PAPER AND ALLIED PRODUCTS—Con.												
2655	Fiber cans, drums, and similar products -----	1982..	152	1 473.5	61	76	87	95	1 134	95	92	(X)	
		1977..	166	1 011.1	54	73	85	94		(NA)	93	89	(X)
		1972..	168	568.0	54	70	82	92		(NA)	95	87	(X)
		1970..	(NA)	458.3	56	72	(NA)	(NA)		(NA)	(NA)	(NA)	2
		1967..	165	385.2	51	68	83	93		(NA)	96	85	(X)
		1966..	(NA)	353.0	54	72	(NA)	(NA)		(NA)	(NA)	(NA)	6
		1963..	166	260.3	57	72	82	92		(NA)	96	80	(X)
2661	Building paper and board mills -----	1982..	19	366.1	59	82	100	(X)	1 409	87	87	(X)	
		1977..	19	473.7	51	(D)	100	(X)		(NA)	93	83	(X)
		1972..	45	456.2	52	73	98	100		(NA)	85	92	(X)
		1970..	(NA)	396.8	44	65	(NA)	(NA)		(NA)	(NA)	(NA)	3
		1967..	43	341.1	46	69	97	100		(NA)	92	96	(X)
		1966..	(NA)	351.2	45	68	(NA)	(NA)		(NA)	(NA)	(NA)	2
		1963..	33	281.6	47	68	97	100		(NA)	97	88	(X)
27	PRINTING AND PUBLISHING												
2711	Newspapers -----	1982..	7 520	21 276.3	22	34	49	66	193	96	100	(X)	
		1977..	7 821	13 055.9	19	31	45	62	(NA)	96	100	(X)	
		1972..	7 461	8 262.8	17	28	43	60	(NA)	96	100	(X)	
		1970..	(NA)	6 990.9	16	24	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1967..	7 589	5 757.1	16	25	40	56	(NA)	97	100	(X)	
		1966..	(NA)	5 520.2	14	22	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1963..	7 982	4 483.6	15	22	36	52	(NA)	96	100	(X)	
		1958..	7 947	3 615.6	17	24	35	51	(NA)	96	100	(X)	
		1954..	8 445	3 091.0	18	24	34	(NA)	(NA)	95	100	(X)	
		1947..	8 115	1 891.3	21	26	36	(NA)	(NA)	94	100	(X)	
	2721	Periodicals -----	1982..	3 143	11 478.0	20	31	49	64	175	93	97	(X)
			1977..	2 860	6 056.5	22	35	52	67	(NA)	90	96	(X)
			1972..	2 451	3 510.6	26	38	54	69	(NA)	89	95	(X)
		1970..	(NA)	3 157.9	28	41	(NA)	(NA)	(NA)	(NA)	(NA)	1	
		1967..	2 430	3 095.9	24	37	56	72	(NA)	89	97	(X)	
		1966..	(NA)	2 717.9	28	41	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1963..	2 562	2 295.7	28	42	59	73	(NA)	89	96	(X)	
		1958..	2 245	1 650.6	31	41	55	69	(NA)	93	97	(X)	
2731	Book publishing -----	1982..	2 007	7 740.0	17	30	56	75	190	94	91	(X)	
		1977..	1 650	4 793.9	17	30	57	74	(NA)	94	88	(X)	
		1972..	1 120	2 856.9	19	31	56	77	(NA)	93	86	(X)	
		1970..	(NA)	2 437.3	21	35	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1967..	963	2 060.2	20	32	57	77	(NA)	95	86	(X)	
		1966..	(NA)	1 996.3	20	33	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1963..	936	1 534.6	20	33	56	76	(NA)	93	88	(X)	
		1958..	883	1 000.9	16	29	48	69	(NA)	92	90	(X)	
2732	Book printing -----	1982..	637	2 392.4	27	37	52	69	278	89	84	(X)	
		1977..	897	1 691.8	25	35	49	64	(NA)	85	78	(X)	
		1972..	674	937.7	24	36	53	68	(NA)	83	73	(X)	
		1970..	(NA)	939.3	22	33	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1967..	720	787.4	21	30	48	64	(NA)	81	70	(X)	
		1966..	(NA)	709.3	22	33	(NA)	(NA)	(NA)	(NA)	(NA)	5	
		1963..	662	546.6	19	30	48	66	(NA)	78	69	(X)	
		1958..	785	354.3	24	34	51	68	(NA)	72	60	(X)	
2741	Miscellaneous publishing -----	1982..	1 952	2 871.3	21	29	44	59	197	95	86	(X)	
		1977..	2 266	1 850.9	24	34	50	63	(NA)	95	89	(X)	
		1972..	1 964	1 070.2	29	42	57	68	(NA)	95	93	(X)	
		1970..	(NA)	724.9	35	52	(NA)	(NA)	(NA)	(NA)	(NA)	3	
		1967..	1 443	605.3	29	46	64	75	(NA)	93	89	(X)	
		1966..	(NA)	495.2	33	43	(NA)	(NA)	(NA)	(NA)	(NA)	6	
		1963..	1 308	389.6	32	44	59	71	(NA)	92	84	(X)	
		1958..	1 038	315.7	29	40	55	68	(NA)	89	87	(X)	
		1954..	900	231.2	31	45	58	(NA)	(NA)	85	82	(X)	
		1947..	569	103.3	22	33	52	(NA)	(NA)	93	78	(X)	
2751	Commercial printing, letterpress <sup>56</sup> -----	1982..	10 211	5 503.9	7	10	16	24	20	90	80	(X)	
		1977..	14 375	4 284.3	14	19	25	31	(NA)	89	81	(X)	
		1972..	13 043	3 305.8	14	19	26	35	(NA)	87	83	(X)	
		1970..	(NA)	3 726.8	15	21	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1967..	11 955	3 255.5	14	21	29	39	(NA)	86	83	(X)	
		1966..	(NA)	3 202.3	14	20	(NA)	(NA)	(NA)	(NA)	(NA)	4	
2752	Commercial printing, lithographic <sup>57</sup> -----	1982..	17 332	19 441.6	6	10	17	24	20	91	93	(X)	
		1977..	10 964	9 359.7	6	10	17	26	(NA)	87	88	(X)	
		1972..	8 160	5 124.8	4	8	15	24	(NA)	87	88	(X)	
		1970..	(NA)	4 155.1	4	8	(NA)	(NA)	(NA)	(NA)	(NA)	2	
		1967..	6 718	3 139.4	5	8	15	25	(NA)	82	80	(X)	
		1966..	(NA)	2 791.4	5	9	(NA)	(NA)	(NA)	(NA)	(NA)	3	
2753	Engraving and plate printing -----	1982..	847	584.2	24	31	42	56	231	92	86	(X)	
		1977..	511	314.9	34	44	57	71	(NA)	88	92	(X)	
		1972..	542	201.6	28	33	43	57	(NA)	92	87	(X)	
		1970..	(NA)	164.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	11	
		1967..	569	137.9	21	28	38	52	(NA)	91	81	(X)	

See footnotes at end of table.

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —								
				4 largest companies	8 largest companies	20 largest companies	50 largest companies					
27	PRINTING AND PUBLISHING—Con.											
2753	Engraving and plate printing—Con.											
	1966..	(NA)	175.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	13	
	1963..	574	111.1	26	34	47	60	(NA)	89	79	(X)	
	1958..	520	85.2	28	35	46	59	(NA)	92	82	(X)	
	1954..	565	60.1	24	30	41	(NA)	(NA)	93	79	(X)	
	1947..	412	45.3	38	44	55	(NA)	(NA)	92	80	(X)	
	1935..	(NA)	(NA)	33	40	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	
2754	Commercial printing, gravure <sup>58</sup> -----	1982..	612	2 170.0	50	66	81	91	1 108	90	86	(X)
		1977..	401	1 056.8	36	54	76	89	(NA)	91	82	(X)
		1972..	120	697.6	35	55	81	96	(NA)	87	79	(X)
2761	Manifold business forms -----	1982..	582	5 058.7	36	47	65	78	571	96	97	(X)
		1977..	601	2 893.8	38	48	64	77	(NA)	93	95	(X)
		1972..	534	1 429.7	45	54	66	78	(NA)	93	92	(X)
		1970..	(NA)	1 233.2	47	57	(NA)	(NA)	(NA)	(NA)	3	
		1967..	454	932.3	47	57	69	81	(NA)	91	90	(X)
		1966..	(NA)	823.9	47	57	(NA)	(NA)	(NA)	(NA)	3	
		1963..	439	637.7	46	55	68	80	(NA)	90	91	(X)
2771	Greeting card publishing -----	1982..	139	1 893.6	84	89	96	99	2 840	75	94	(X)
		1977..	155	1 072.1	77	85	93	98	(NA)	78	95	(X)
		1972..	186	755.4	70	78	88	96	(NA)	76	97	(X)
		1970..	(NA)	659.6	75	85	(NA)	(NA)	(NA)	(NA)	1	
		1967..	203	517.9	67	79	88	95	(NA)	87	93	(X)
		1966..	(NA)	460.1	64	76	(NA)	(NA)	(NA)	(NA)	5	
		1963..	239	346.0	57	71	82	92	(NA)	92	96	(X)
		1958..	265	276.0	45	62	75	89	(NA)	94	93	(X)
		1954..	280	208.9	42	57	73	(NA)	(NA)	93	89	(X)
		1947..	161	123.9	39	55	74	(NA)	(NA)	92	87	(X)
2782	Blankbooks and looseleaf binders-----	1982..	333	2 039.4	41	55	72	86	777	86	92	(X)
		1977..	371	1 122.6	43	56	70	83	(NA)	86	91	(X)
		1972..	377	591.1	38	48	62	78	(NA)	89	90	(X)
		1970..	(NA)	461.5	39	48	(NA)	(NA)	(NA)	(NA)	4	
		1967..	402	381.3	35	45	59	77	(NA)	86	88	(X)
		1966..	(NA)	344.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	4	
		1963..	380	268.2	33	44	57	76	(NA)	88	88	(X)
2789	Bookbinding and related work -----	1982..	994	763.5	9	14	24	39	45	96	91	(X)
		1977..	974	533.6	10	17	30	46	(NA)	96	94	(X)
		1972..	990	377.2	11	18	31	46	(NA)	95	89	(X)
		1970..	(NA)	353.3	10	16	(NA)	(NA)	(NA)	(NA)	3	
		1967..	1 008	340.6	11	18	30	47	(NA)	94	89	(X)
		1966..	(NA)	349.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7	
		1963..	1 038	228.5	12	17	28	44	(NA)	95	83	(X)
		1958..	966	182.0	10	16	(NA)	(NA)	(NA)	94	86	(X)
2791	Typesetting -----	1982..	3 045	1 242.9	7	10	16	26	23	97	88	(X)
		1977..	2 370	730.6	6	9	17	29	(NA)	97	89	(X)
		1972..	1 860	482.8	5	8	16	29	(NA)	97	91	(X)
		1970..	(NA)	462.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7	
		1967..	1 518	356.7	7	11	19	32	(NA)	95	92	(X)
		1966..	(NA)	309.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9	
		1963..	1 271	241.0	6	10	18	30	(NA)	95	90	(X)
		1958..	1 181	175.1	6	10	19	33	(NA)	93	92	(X)
		1954..	1 078	121.4	5	9	18	(NA)	(NA)	94	87	(X)
		1947..	793	75.7	8	13	24	(NA)	(NA)	94	87	(X)
2793	Photoengraving ----- <sup>59</sup>	1982..	302	153.2	28	37	52	71	272	82	77	(X)
		1977..	440	218.0	28	38	55	71	(NA)	83	79	(X)
		1972..	583	229.7	13	19	32	50	(NA)	84	83	(X)
		1970..	(NA)	219.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9	
		1967..	732	234.3	10	16	27	44	(NA)	94	91	(X)
		1966..	(NA)	225.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	8	
		1963..	872	212.4	8	13	24	38	(NA)	95	91	(X)
		1958..	897	206.0	8	13	24	37	(NA)	95	93	(X)
		1954..	884	173.0	6	11	21	(NA)	(NA)	95	93	(X)
		1947..	754	133.5	8	12	22	(NA)	(NA)	96	95	(X)
2794	Electrotyping and stereotyping ----- <sup>59</sup>	1982..	( <sup>59</sup> )	( <sup>59</sup> )	( <sup>59</sup> )	( <sup>59</sup> )	( <sup>59</sup> )	( <sup>59</sup> )	( <sup>59</sup> )	( <sup>59</sup> )	( <sup>59</sup> )	(X)
		1977..	40	13.8	52	70	90	100	(NA)	79	66	(X)
		1972..	72	36.8	43	57	79	98	(NA)	81	77	(X)
		1970..	(NA)	54.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7	
		1967..	124	62.1	34	45	63	87	(NA)	89	85	(X)
		1966..	(NA)	81.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	6	
		1963..	170	76.1	31	39	57	80	(NA)	87	86	(X)
		1958..	206	77.7	29	35	49	70	(NA)	92	87	(X)
		1954..	219	85.9	23	34	51	(NA)	(NA)	89	89	(X)
		1947..	205	59.0	24	34	49	(NA)	(NA)	92	87	(X)
		1935..	(NA)	(NA)	36	46	(NA)	(NA)	(NA)	(NA)	(X)	
2795	Lithographic platemaking services <sup>60</sup> -----	1982..	770	1 187.7	19	25	36	51	135	91	89	(X)
		1977..	677	667.0	17	23	33	48	(NA)	87	89	(X)
		1972..	330	257.0	21	29	41	60	(NA)	87	83	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>						Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —								
				4 largest companies	8 largest companies	20 largest companies	50 largest companies					
28	CHEMICALS AND ALLIED PRODUCTS											
2812	Alkalies and chlorine -----	1982..	35	1 570.5	49	78	99+	100	952	81	53	(X)
		1977..	30	1 654.8	66	87	99+	100	(NA)	63	58	(X)
		1972..	28	823.2	72	91	99+	100	(NA)	65	65	(X)
		1970..	(NA)	660.3	71	93	(NA)	(NA)	(NA)	(NA)	1	(X)
		1967..	19	719.8	63	88	100	(X)	(NA)	67	75	(X)
		1966..	(NA)	782.7	63	88	(NA)	(NA)	(NA)	(NA)	2	(X)
		1963..	19	652.1	62	88	100	(X)	(NA)	66	79	(X)
		1958..	18	488.1	64	89	100	(X)	(NA)	73	84	(X)
		1954..	17	399.9	69	90	100	(X)	(NA)	76	84	(X)
		1947..	18	208.6	70	93	100	(X)	(NA)	81	85	(X)
2813	Industrial gases -----	1982..	105	2 019.3	75	87	95	99	1 530	98	91	(X)
		1977..	109	1 234.6	65	84	93	98	(NA)	97	93	(X)
		1972..	105	679.3	65	81	93	98	(NA)	96	92	(X)
		1970..	(NA)	665.0	75	(S)	(NA)	(NA)	(NA)	(NA)	1	(X)
		1967..	113	588.7	67	84	95	99	(NA)	96	89	(X)
		1966..	(NA)	549.7	72	88	(NA)	(NA)	(NA)	(NA)	2	(X)
		1963..	104	425.4	72	86	95	99	(NA)	98	87	(X)
		1958..	111	232.0	79	88	94	98	(NA)	97	84	(X)
		1954..	101	167.7	84	88	93	(NA)	(NA)	99	84	(X)
		1947..	69	93.5	83	88	94	(NA)	(NA)	100	84	(X)
1935..	(NA)	(NA)	79	87	(NA)	(NA)	(NA)	(NA)	(NA)	(X)		
2816	Inorganic pigments -----	1982..	86	1 630.0	46	67	91	98	933	88	88	(X)
		1977..	71	1 259.9	54	78	94	99+	(NA)	88	84	(X)
		1972..	77	796.9	52	72	91	99	(NA)	86	86	(X)
		1970..	(NA)	635.2	56	74	(NA)	(NA)	(NA)	(NA)	2	(X)
		1967..	65	549.3	59	78	95	99+	(NA)	90	84	(X)
		1966..	(NA)	581.8	64	83	(NA)	(NA)	(NA)	(NA)	2	(X)
		1963..	69	484.8	68	84	96	99+	(NA)	91	87	(X)
		1958..	67	402.6	69	83	96	99+	(NA)	92	90	(X)
		1954..	73	371.4	67	83	96	(NA)	(NA)	88	88	(X)
2819	Industrial inorganic chemicals, n.e.c. <sup>61 62</sup> -----	1982..	425	12 060.4	31	46	70	88	430	91	77	(X)
		1977..	345	8 695.7	33	49	74	90	(NA)	87	77	(X)
		1972..	166	3 833.3	34	52	76	93	(NA)	89	79	(X)
2821	Plastics materials and resins <sup>63</sup> -----	1982..	263	15 769.2	22	38	64	89	272	87	77	(X)
		1977..	221	10 818.2	22	37	60	87	(NA)	85	74	(X)
		1972..	193	4 478.2	26	41	65	90	(NA)	90	74	(X)
2822	Synthetic rubber -----	1982..	63	3 156.4	49	74	99	100	935	80	78	(X)
		1977..	56	1 863.3	60	83	99	100	(NA)	91	71	(X)
		1972..	50	1 089.4	62	81	98	100	(NA)	90	74	(X)
		1970..	(NA)	992.1	64	85	(NA)	(NA)	(NA)	(NA)	1	(X)
		1967..	33	926.9	61	82	100	100	(NA)	89	81	(X)
		1966..	(NA)	954.7	56	78	(NA)	(NA)	(NA)	(NA)	2	(X)
		1963..	16	763.9	57	80	100	(X)	(NA)	92	80	(X)
		1958..	13	529.2	60	86	100	(X)	(NA)	95	83	(X)
		1954..	13	361.1	53	81	100	(X)	(NA)	98	90	(X)
		1947..	5	235.2	(D)	100	(X)	(X)	(NA)	96	89	(X)
2823	Cellulosic manmade fibers -----	1982..	5	1 239.9	(D)	100	(X)	(X)	2 970	(D)	(D)	(X)
		1977..	5	1 002.8	(D)	100	(X)	(X)	(NA)	(D)	(D)	(X)
		1972..	12	589.5	96	(D)	100	(X)	(NA)	(D)	(D)	(X)
		1970..	(NA)	685.0	(D)	100	(NA)	(NA)	(NA)	(NA)	1	(X)
		1967..	13	902.8	86	99+	100	(X)	(NA)	(NA)	(NA)	(X)
		1966..	(NA)	924.1	85	100	(NA)	(NA)	(NA)	(NA)	2	(X)
		1963..	8	731.8	82	100	(X)	(X)	(NA)	(D)	(D)	(X)
2824	Organic fibers, noncellulosic <sup>64</sup> -----	1982..	44	8 262.7	77	91	99	100	2 349	85	6581	(X)
		1977..	37	6 379.7	78	90	99	100	(NA)	84	6579	(X)
		1972..	36	3 638.9	74	91	99+	100	(NA)	80	97	(X)
		1970..	(NA)	2 822.3	73	89	(NA)	(NA)	(NA)	(NA)	1	(X)
		1967..	22	2 033.2	84	94	(D)	100	(NA)	92	94	(X)
		1966..	(NA)	1 991.8	85	95	(NA)	(NA)	(NA)	(NA)	2	(X)
		1963..	14	1 403.2	94	99	100	(X)	(NA)	95	97	(X)
2831	Biological products -----	1982..	287	2 300.0	31	49	74	92	400	89	77	(X)
		1977..	250	898.5	32	49	74	91	(NA)	93	73	(X)
		1972..	158	360.0	37	53	82	95	(NA)	87	60	(X)
		1970..	(NA)	236.7	37	59	(NA)	(NA)	(NA)	(NA)	1	(X)
		1967..	119	160.0	39	63	86	97	(NA)	90	61	(X)
		1966..	(NA)	108.4	46	72	(NA)	(NA)	(NA)	(NA)	7	(X)
		1963..	102	95.7	36	57	86	98	(NA)	88	45	(X)
		1958..	110	56.6	44	59	84	97	(NA)	89	41	(X)
		1954..	86	61.0	46	51	81	(NA)	(NA)	86	65	(X)
		1947..	79	40.0	38	51	76	(NA)	(NA)	87	57	(X)
2833	Medicinals and botanicals -----	1982..	210	3 397.9	62	75	85	94	1 470	83	74	(X)
		1977..	153	1 889.9	65	78	89	96	(NA)	82	68	(X)
		1972..	125	509.0	59	75	90	98	(NA)	87	51	(X)
		1970..	(NA)	528.3	64	74	(NA)	(NA)	(NA)	(NA)	2	(X)
		1967..	112	445.2	74	81	91	98	(NA)	71	56	(X)
		1966..	(NA)	285.1	70	81	(NA)	(NA)	(NA)	(NA)	3	(X)
		1963..	122	305.8	68	79	91	99	(NA)	71	47	(X)
		1958..	114	299.3	64	77	89	98	(NA)	72	55	(X)
		1954..	107	252.5	72	84	93	(NA)	(NA)	69	59	(X)
2834	Pharmaceutical preparations -----	1982..	584	18 997.6	26	42	69	90	318	89	96	(X)
		1977..	655	11 459.4	24	43	73	91	(NA)	86	97	(X)
		1972..	680	7 149.5	26	44	75	91	(NA)	87	97	(X)
		1970..	(NA)	6 027.8	26	43	(NA)	(NA)	(NA)	(NA)	1	(X)
		1967..	791	4 696.4	24	40	73	90	(NA)	87	97	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies					50 largest companies
28	CHEMICALS AND ALLIED PRODUCTS—Con.										
2834	Pharmaceutical preparations—Con.										
	1966...	(NA)	4 432.4	24	41	(NA)	(NA)	(NA)	(NA)	2	
	1963...	944	3 314.3	22	38	72	89	(NA)	87	(X)	
	1958...	1 064	2 533.4	27	45	73	87	(NA)	88	(X)	
	1954...	1 128	1 643.1	25	44	64	(NA)	(NA)	91	(X)	
	1947...	1 123	941.3	28	44	68	(NA)	(NA)	91	(X)	
2841	Soap and other detergents										
	1982...	642	9 167.3	60	73	83	90	1 306	84	(X)	
	1977...	554	5 671.4	59	71	82	89	(NA)	84	(X)	
	1972...	577	3 394.4	62	74	85	92	(NA)	83	(X)	
	1970...	(NA)	2 988.7	70	79	(NA)	(NA)	(NA)	(NA)	1	
	1967...	599	2 593.4	70	78	86	92	(NA)	83	(X)	
	1966...	(NA)	2 395.9	72	80	(NA)	(NA)	(NA)	(NA)	2	
	1963...	641	2 127.8	72	80	88	93	(NA)	82	(X)	
2842	Polishes and sanitation goods <sup>66</sup>										
	1982...	747	4 613.7	39	57	69	80	526	74	(X)	
	1977...	946	3 157.3	41	56	67	78	(NA)	76	(X)	
	1972...	1 022	1 867.6	43	54	65	78	(NA)	81	(X)	
2843	Surface active agents										
	1982...	181	2 067.2	43	54	73	90	639	81	(X)	
	1977...	148	944.8	32	46	69	90	(NA)	81	(X)	
	1972...	151	462.6	28	42	64	89	(NA)	81	(X)	
	1970...	(NA)	398.7	31	46	(NA)	(NA)	(NA)	(NA)	6	
	1967...	154	294.2	34	47	65	85	(NA)	79	(X)	
	1966...	(NA)	252.1	38	50	(NA)	(NA)	(NA)	(NA)	3	
	1963...	137	177.8	39	50	67	86	(NA)	80	(X)	
2844	Toilet preparations										
	1982...	596	10 183.2	34	49	71	88	469	96	(X)	
	1977...	644	6 557.2	40	56	74	90	(NA)	95	(X)	
	1972...	593	4 053.0	38	53	74	91	(NA)	94	(X)	
	1970...	(NA)	3 461.1	39	52	(NA)	(NA)	(NA)	(NA)	2	
	1967...	628	2 515.6	38	52	74	90	(NA)	94	(X)	
	1966...	(NA)	2 430.6	40	54	(NA)	(NA)	(NA)	(NA)	2	
	1963...	673	1 792.7	38	52	75	90	(NA)	91	(X)	
	1958...	721	997.2	29	45	70	87	(NA)	92	(X)	
	1954...	693	628.5	25	40	64	(NA)	(NA)	91	(X)	
	1947...	692	381.4	24	38	59	(NA)	(NA)	84	(X)	
	1935...	(NA)	(NA)	25	40	(NA)	(NA)	(NA)	(NA)	(X)	
2851	Paints and allied products <sup>67</sup>										
	1982...	1 170	9 162.1	24	36	53	67	222	97	(X)	
	1977...	1 288	6 629.7	24	36	52	67	(NA)	96	(X)	
	1972...	1 318	3 821.8	22	34	51	66	(NA)	95	(X)	
	1970...	(NA)	3 407.8	22	34	(NA)	(NA)	(NA)	(NA)	2	
	1967...	1 459	2 911.4	22	35	48	61	(NA)	95	(X)	
	1966...	(NA)	2 970.4	23	36	(NA)	(NA)	(NA)	(NA)	2	
	1963...	1 579	2 456.4	23	34	47	60	(NA)	95	(X)	
2861	Gum and wood chemicals										
	1982...	67	624.2	54	80	96	99+	996	84	(X)	
	1977...	100	391.3	59	80	92	98	(NA)	76	(X)	
	1972...	118	332.3	68	83	94	99	(NA)	70	(X)	
	1970...	(NA)	261.7	73	85	(NA)	(NA)	(NA)	(NA)	3	
	1967...	172	215.9	70	79	88	97	(NA)	73	(X)	
	1966...	(NA)	209.5	72	84	(NA)	(NA)	(NA)	(NA)	4	
	1963...	229	212.9	63	71	83	94	(NA)	74	(X)	
2865	Cyclic crudes and intermediates										
	1982...	143	7 138.2	40	55	79	95	581	76	(X)	
	1977...	135	5 637.0	42	60	79	95	(NA)	68	(X)	
	1972...	124	2 049.6	34	52	77	96	(NA)	76	(X)	
	1970...	(NA)	1 792.2	36	56	(NA)	(NA)	(NA)	(NA)	1	
	1967...	115	1 596.8	45	64	83	97	(NA)	73	(X)	
	1963...	120	1 212.8	53	71	88	99+	(NA)	(NA)	(X)	
2869	Industrial organic chemicals, n.e.c. <sup>9</sup>										
	1982...	488	30 394.4	36	52	73	90	475	74	(X)	
	1977...	384	24 232.8	38	55	73	90	(NA)	69	(X)	
	1972...	351	9 223.5	43	57	74	92	(NA)	72	(X)	
	1970...	(NA)	7 373.8	44	58	(NA)	(NA)	(NA)	(NA)	1	
	1967...	339	6 377.8	45	58	75	92	(NA)	72	(X)	
	1966...	(NA)	6 541.1	46	60	(NA)	(NA)	(NA)	(NA)	2	
	1963...	343	4 840.2	51	63	79	93	(NA)	72	(X)	
	1958...	250	3 070.2	55	70	85	96	(NA)	73	(X)	
	1954...	202	2 198.7	59	73	87	(NA)	(NA)	77	(X)	
2873	Nitrogenous fertilizers <sup>68</sup>										
	1982...	109	3 391.1	32	57	87	99	515	88	(X)	
	1977...	110	2 603.4	34	54	82	99	(NA)	84	(X)	
	1972...	47	799.4	35	53	84	100	(NA)	85	(X)	
2874	Phosphatic fertilizers <sup>69</sup>										
	1982...	69	3 921.9	37	62	92	99+	600	94	(X)	
	1977...	45	2 681.7	35	57	92	100	(NA)	93	(X)	
	1972...	66	1 178.9	29	47	83	99	(NA)	89	(X)	
2875	Fertilizers, mixing only										
	1982...	372	1 903.4	19	29	50	72	170	97	(X)	
	1977...	457	1 866.6	21	37	56	71	(NA)	95	(X)	
	1972...	442	800.0	24	38	57	74	(NA)	96	(X)	
	1970...	(NA)	703.1	24	37	(NA)	(NA)	(NA)	(NA)	3	
	1967...	496	731.1	23	36	54	72	(NA)	96	(X)	

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —								
				4 largest companies	8 largest companies	20 largest companies	50 largest companies					
28	CHEMICALS AND ALLIED PRODUCTS—Con.											
2875	Fertilizers, mixing only—Con.											
	1966..	(NA)	734.9	21	36	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1963..	537	623.1	20	31	48	64	(NA)	94	96	(X)	
	1958..	514	355.1	18	28	47	64	(NA)	(NA)	(NA)	(X)	
	1954..	437	329.3	20	29	46	(NA)	(NA)	95	44	(X)	
	1947..	377	193.3	18	28	47	(NA)	(NA)	49	47	(X)	
2879	Agricultural chemicals, n.e.c. <sup>72</sup> -----	1982..	286	5 436.1	44	66	85	94	703	81	87	(X)
	1977..	338	2 780.4	44	64	78	89	(NA)	83	77	(X)	
	1972..	297	1 150.8	39	57	76	89	(NA)	87	72	(X)	
2891	Adhesives and sealants <sup>73</sup> -----	1982..	518	2 857.9	21	33	50	70	199	90	84	(X)
	1977..	405	1 813.1	24	35	54	74	(NA)	89	81	(X)	
	1972..	317	928.0	19	31	52	76	(NA)	89	82	(X)	
2892	Explosives <sup>62</sup> -----	1982..	73	922.7	59	77	92	99+	1 302	91	96	(X)
	1977..	63	666.3	64	79	96	99+	(NA)	86	95	(X)	
	1972..	55	402.7	67	86	98	99+	(NA)	92	95	(X)	
	1970..	(NA)	501.3	72	95	(NA)	(NA)	(NA)	(NA)	(NA)	1	
	1967..	37	647.0	67	91	99	100	(NA)	93	93	(X)	
	1966..	(NA)	469.4	72	87	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1963..	41	283.3	72	86	99	100	(NA)	88	94	(X)	
	1958..	45	222.5	77	89	98	100	(NA)	98	96	(X)	
	1954..	40	389.6	79	92	99	100	(NA)	98	91	(X)	
	1947..	35	136.4	80	89	98	100	(NA)	87	99	(X)	
2893	Printing ink -----	1982..	228	1 572.6	42	55	73	88	595	98	97	(X)
	1977..	205	944.9	43	57	74	89	(NA)	97	97	(X)	
	1972..	213	508.4	39	54	75	88	(NA)	95	93	(X)	
	1970..	(NA)	397.4	49	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3	
	1967..	207	375.6	49	64	79	90	(NA)	93	95	(X)	
	1966..	(NA)	377.0	48	58	(NA)	(NA)	(NA)	(NA)	(NA)	6	
	1963..	216	268.0	48	63	77	90	(NA)	93	92	(X)	
	1958..	193	223.6	53	65	78	91	(NA)	91	97	(X)	
	1954..	188	180.6	54	65	79	(NA)	(NA)	90	95	(X)	
	1947..	151	115.7	57	69	81	(NA)	(NA)	92	78	(X)	
	1935..	(NA)	(NA)	49	60	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	
2895	Carbon black -----	1982..	8	632.9	73	100	(X)	(X)	1 752	100	5395	(X)
	1977..	8	468.4	70	100	(X)	(X)	(NA)	100	5395	(X)	
	1972..	11	227.0	74	99+	100	(X)	(NA)	100	5395	(X)	
	1970..	(NA)	169.7	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1	
	1967..	11	167.8	72	(D)	100	(X)	(NA)	100	100	(X)	
	1966..	(NA)	187.8	70	100	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1963..	8	149.1	72	100	(X)	(X)	(NA)	(D)	(D)	(X)	
2899	Chemical preparations, n.e.c. <sup>74</sup> -----	1982..	1 245	6 344.3	22	32	46	63	197	85	84	(X)
	1977..	1 479	3 950.6	15	25	40	56	(NA)	87	77	(X)	
	1972..	1 485	2 202.3	16	26	41	58	(NA)	84	75	(X)	
	1970..	(NA)	1 663.4	19	27	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1967..	1 275	1 381.6	19	28	43	62	(NA)	82	72	(X)	
	1966..	(NA)	1 322.5	20	31	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1963..	1 312	964.6	20	30	46	64	(NA)	82	71	(X)	
29	PETROLEUM AND COAL PRODUCTS											
2911	Petroleum refining -----	1982..	282	199 356.5	28	48	76	93	380	99	7598	(X)
	1977..	192	91 688.8	30	53	81	94	(NA)	99	7597	(X)	
	1972..	152	25 921.1	31	56	84	95	(NA)	99	7597	(X)	
	1970..	(NA)	22 737.9	33	57	(NA)	(NA)	(NA)	(NA)	(NA)	1	
	1967..	276	20 293.9	33	57	84	96	(NA)	98	7597	(X)	
	1966..	(NA)	18 758.7	32	57	(NA)	(NA)	(NA)	(NA)	(NA)	2	
	1963..	266	16 496.9	34	56	82	95	(NA)	98	7597	(X)	
	1958..	289	14 106.3	32	55	82	94	(NA)	98	7598	(X)	
	1954..	253	11 757.2	33	56	84	(NA)	(NA)	99	7598	(X)	
	1947..	277	6 623.7	37	59	83	(NA)	(NA)	99	7597	(X)	
	1935..	(NA)	(NA)	38	58	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	
2951	Paving mixtures and blocks -----	1982..	569	3 098.6	17	24	37	54	140	93	96	(X)
	1977..	590	1 578.3	17	23	35	51	(NA)	95	93	(X)	
	1972..	585	922.5	15	23	34	51	(NA)	93	90	(X)	
	1970..	(NA)	745.8	16	24	(NA)	(NA)	(NA)	(NA)	(NA)	4	
	1967..	553	584.6	14	22	35	51	(NA)	93	95	(X)	
	1966..	(NA)	479.2	15	23	(NA)	(NA)	(NA)	(NA)	(NA)	4	
	1963..	528	427.5	15	21	35	51	(NA)	92	89	(X)	
	1958..	415	255.3	11	17	31	51	(NA)	93	89	(X)	
	1954..	252	126.6	15	24	42	(NA)	(NA)	97	94	(X)	
	1947..	182	51.0	19	30	45	(NA)	(NA)	99	88	(X)	
	1935..	(NA)	(NA)	48	63	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	
2952	Asphalt felts and coatings -----	1982..	147	2 849.5	45	68	87	96	777	95	98	(X)
	1977..	146	2 077.6	45	72	87	97	(NA)	91	97	(X)	
	1972..	116	1 010.3	48	74	88	97	(NA)	93	96	(X)	
	1970..	(NA)	689.9	38	65	(NA)	(NA)	(NA)	(NA)	(NA)	4	
	1967..	115	597.8	38	65	86	97	(NA)	91	95	(X)	

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
29	PETROLEUM AND COAL PRODUCTS—Con.									
2952	Asphalt felts and coatings—Con.									
	1966...	(NA)	589.4	38	65	(NA)	(NA)	(NA)	(NA)	2
	1963...	126	527.6	37	66	85	97	(NA)	90	(X)
	1958...	120	420.7	37	64	86	97	(NA)	90	(X)
	1954...	108	400.8	39	67	89	(NA)	(NA)	91	(X)
	1947...	104	338.2	42	65	87	(NA)	(NA)	95	(X)
	1935...	(NA)	(NA)	42	68	(NA)	(NA)	(NA)	(NA)	(X)
2992	Lubricating oils and greases									
	1982...	401	2 875.3	28	38	54	74	275	94	<sup>76</sup> 46 (X)
	1977...	417	1 644.7	28	40	58	76	(NA)	94	<sup>76</sup> 44 (X)
	1972...	386	703.1	31	44	58	73	(NA)	94	<sup>76</sup> 40 (X)
	1970...	(NA)	553.5	39	52	(NA)	(NA)	(NA)	(NA)	5
	1967...	256	487.3	38	50	68	84	(NA)	93	<sup>76</sup> 32 (X)
	1966...	(NA)	527.4	36	48	(NA)	(NA)	(NA)	(NA)	3
	1963...	311	471.2	36	48	65	80	(NA)	91	<sup>76</sup> 33 (X)
	1958...	284	260.2	29	44	63	80	(NA)	83	<sup>76</sup> 25 (X)
	1954...	265	224.2	28	42	61	(NA)	(NA)	87	<sup>76</sup> 18 (X)
	1947...	205	169.3	36	48	66	(NA)	(NA)	89	<sup>76</sup> 19 (X)
2999	Petroleum and coal products, n.e.c.									
	1982...	100	738.8	61	77	91	99	1 426	94	89 (X)
	1977...	60	463.3	67	84	94	99+	(NA)	97	87 (X)
	1972...	42	137.6	74	89	93	100	(NA)	99	91 (X)
	1970...	(NA)	119.0	82	91	(NA)	(NA)	(NA)	(NA)	2
	1967...	38	79.8	82	92	99	100	(NA)	99	92 (X)
	1966...	(NA)	64.1	80	91	(NA)	(NA)	(NA)	(NA)	2
	1963...	59	71.5	70	84	96	99+	(NA)	96	91 (X)
	1958...	74	67.8	63	72	89	99	(NA)	95	96 (X)
	1954...	39	58.5	58	72	95	100	(NA)	94	89 (X)
30	RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS									
3011	Tires and inner tubes									
	1982...	108	9 340.1	66	86	98	99+	1 591	99	98 (X)
	1977...	121	8 971.0	70	88	97	99+	(NA)	96	99 (X)
	1972...	136	5 747.1	73	90	98	99+	(NA)	97	99 (X)
	1970...	(NA)	4 587.2	72	89	(NA)	(NA)	(NA)	(NA)	1
	1967...	119	3 733.9	70	88	97	100	(NA)	95	99 (X)
	1966...	(NA)	3 715.8	71	90	(NA)	(NA)	(NA)	(NA)	2
	1963...	105	2 949.7	70	89	97	99+	(NA)	(D)	99 (X)
3021	Rubber and plastics footwear <sup>77</sup>									
	1982...	53	706.2	39	61	94	100	609	96	94 (X)
	1977...	67	517.0	58	73	95	99+	(NA)	93	99 (X)
	1972...	82	600.0	59	70	89	99	(NA)	94	99 (X)
	1970...	(NA)	515.0	58	76	(NA)	(NA)	(NA)	(NA)	2
	1967...	51	427.0	59	75	92	(D)	(NA)	(NA)	(X)
	1966...	(NA)	410.1	63	80	(NA)	(NA)	(NA)	(NA)	2
	1963...	44	354.2	62	77	94	100	(NA)	93	90 (X)
	1958...	22	219.0	65	82	(D)	100	(NA)	88	90 (X)
	1954...	19	166.4	72	87	100	(X)	(NA)	84	85 (X)
	1947...	20	198.7	81	93	100	(X)	(NA)	80	99 (X)
	1935...	(NA)	(NA)	81	100	(NA)	(NA)	(NA)	(NA)	(X)
3031	Reclaimed rubber									
	1982...	25	45.1	72	89	99+	100	1 620	95-100	100 (X)
	1977...	21	41.6	74	(D)	(D)	100	(NA)	100	62 (X)
	1972...	19	29.7	78	95	100	(X)	(NA)	96	55 (X)
	1970...	(NA)	41.4	88	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967...	19	43.8	87	96	100	(X)	(NA)	83	75 (X)
	1966...	(NA)	52.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	2
	1963...	7	48.9	93	100	(X)	(X)	(NA)	(D)	77 (X)
	1958...	12	37.6	87	97	100	(X)	(NA)	94	74 (X)
	1954...	15	39.0	73	94	100	(X)	(NA)	87	74 (X)
	1947...	14	17.2	84	96	100	(X)	(NA)	95	44 (X)
3041	Rubber and plastics hose and belting <sup>78</sup>									
	1982...	103	1 945.5	62	73	86	97	1 101	86	94 (X)
	1977...	101	1 765.7	55	71	87	97	(NA)	88	92 (X)
	1972...	66	1 020.1	52	72	91	99	(NA)	85	89 (X)
3069	Fabricated rubber products, n.e.c. <sup>79</sup>									
	1982...	1 213	6 365.7	12	20	34	53	82	86	90 (X)
	1977...	1 127	4 565.0	16	24	38	55	(NA)	88	90 (X)
	1972...	967	2 830.9	16	24	40	59	(NA)	84	89 (X)
3079	Miscellaneous plastics products <sup>80</sup>									
	1982...	10 152	37 013.1	7	10	17	26	22	95	92 (X)
	1977...	8 817	23 692.6	7	11	18	30	(NA)	94	91 (X)
	1972...	6 762	10 695.9	8	12	21	34	(NA)	94	88 (X)
	1970...	(NA)	6 992.8	8	13	(NA)	(NA)	(NA)	(NA)	2
	1967...	4 495	5 414.5	8	13	21	33	(NA)	93	84 (X)
	1966...	(NA)	4 658.3	8	12	(NA)	(NA)	(NA)	(NA)	3
	1963...	4 101	3 165.4	8	12	20	31	(NA)	92	80 (X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)			
			Total (million dollars)	Percent accounted for by <sup>4</sup> —										
				4 largest companies	8 largest companies	20 largest companies	50 largest companies							
31	LEATHER AND LEATHER PRODUCTS													
3111	Leather tanning and finishing -----	1982..	342	1 753.0	18	31	56	81	206	99	99	(X)		
		1977..	428	1 456.1	17	28	51	76	(NA)	99	99	(X)		
		1972..	468	1 059.5	17	28	48	71	(NA)	99	99	(X)		
		1970..	(NA)	793.3	21	32	(NA)	(NA)	(NA)	(NA)	(NA)	2		
		1967..	474	870.1	20	31	50	71	(NA)	98	99	(X)		
		1966..	(NA)	940.5	19	30	(NA)	(NA)	(NA)	(NA)	(NA)	3		
		1963..	482	758.4	18	30	47	70	(NA)	99	100	(X)		
		1958..	520	732.4	18	30	47	68	(NA)	100	100	(X)		
		1954..	525	706.2	18	28	45	(NA)	(NA)	98	100	(X)		
		1947..	500	1 070.3	27	39	55	(NA)	(NA)	100	100	(X)		
		1935..	(NA)	(NA)	22	34	(NA)	(NA)	(NA)	(NA)	(NA)	(X)		
		3131	Boot and shoe cut stock and findings -----	1982..	149	367.8	25	42	67	90	325	94	94	(X)
				1977..	174	270.6	21	32	55	83	(NA)	90	92	(X)
				1972..	225	206.5	17	27	49	75	(NA)	94	95	(X)
1970..	(NA)			247.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5		
1967..	348			262.8	19	28	44	64	(NA)	94	93	(X)		
1966..	(NA)			(282.8)	19	25	(NA)	(NA)	(NA)	(NA)	(NA)	17		
1963..	414			229.3	20	27	40	60	(NA)	93	94	(X)		
1958..	472			243.0	19	29	41	58	(NA)	95	95	(X)		
1954..	522			246.4	22	32	44	(NA)	(NA)	97	96	(X)		
1947..	544			294.3	30	41	55	(NA)	(NA)	99	97	(X)		
1935..	(NA)			(NA)	32	42	(NA)	(NA)	(NA)	(NA)	(NA)	1		
3142	House slippers <sup>28</sup> -----			1982..	53	275.8	60	76	94	(D)	1 262	96	98	(X)
				1977..	65	201.2	44	64	87	99	(NA)	94	96	(X)
				1972..	83	151.4	39	58	80	97	(NA)	95	87	(X)
		1970..	(NA)	175.3	28	44	(NA)	(NA)	(NA)	(NA)	(NA)	4		
		1967..	125	181.0	22	37	63	88	(NA)	92	93	(X)		
		1966..	(NA)	162.0	18	31	(NA)	(NA)	(NA)	(NA)	(NA)	8		
		1963..	149	123.6	20	34	58	84	(NA)	90	85	(X)		
		1958..	159	111.0	18	30	56	83	(NA)	90	85	(X)		
		1954..	170	90.5	19	31	54	(NA)	(NA)	89	87	(X)		
		3143	Men's footwear, except athletic <sup>12</sup> -----	1982..	129	2 261.4	28	45	74	96	378	89	95	(X)
				1977..	115	1 734.5	31	46	73	95	(NA)	92	96	(X)
				1972..	118	1 288.9	34	51	74	95	(NA)	93	97	(X)
				3144	Women's footwear, except athletic <sup>12</sup> -----	1982..	209	1 933.2	38	47	64	84	492	94
		1977..	243			1 361.2	29	39	56	79	(NA)	97	92	(X)
1972..	294	1 346.1	32			42	56	76	(NA)	97	95	(X)		
3149	Footwear, except rubber, n.e.c. <sup>12</sup> -----	1982..	167			798.9	26	41	68	93	336	82	81	(X)
		1977..	159	594.8	24	41	68	91	(NA)	84	83	(X)		
		1972..	153	485.8	30	42	65	87	(NA)	88	85	(X)		
		3151	Leather gloves and mittens -----	1982..	80	177.6	38	56	82	97	581	86	81	(X)
1977..	84			178.0	38	54	79	97	(NA)	83	85	(X)		
1972..	95			98.2	35	50	74	95	(NA)	92	85	(X)		
1970..	(NA)			96.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	8		
1967..	136			86.7	30	43	65	89	(NA)	90	84	(X)		
1966..	(NA)			89.6	25	36	(NA)	(NA)	(NA)	(NA)	(NA)	10		
1963..	160			80.6	22	34	57	84	(NA)	81	89	(X)		
3161	Luggage -----	1982..	286	789.0	41	51	69	83	669	93	95	(X)		
		1977..	286	654.9	40	50	66	85	(NA)	94	98	(X)		
		1972..	266	364.5	39	50	65	82	(NA)	92	97	(X)		
		1970..	(NA)	312.4	38	51	(NA)	(NA)	(NA)	(NA)	(NA)	5		
		1967..	328	334.2	34	45	59	77	(NA)	96	94	(X)		
		1966..	(NA)	275.8	35	45	(NA)	(NA)	(NA)	(NA)	(NA)	8		
		1963..	377	210.3	31	40	55	73	(NA)	95	94	(X)		
3171	Women's handbags and purses -----	1982..	383	623.7	30	38	55	75	487	96	94	(X)		
		1977..	404	505.2	21	31	48	70	(NA)	97	97	(X)		
		1972..	431	365.0	14	23	39	61	(NA)	95	97	(X)		
		1970..	(NA)	280.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5		
		1967..	488	327.2	10	17	30	52	(NA)	98	98	(X)		
		1966..	(NA)	291.9	11	19	(NA)	(NA)	(NA)	(NA)	(NA)	11		
		1963..	539	280.3	11	18	31	51	(NA)	98	98	(X)		
		1958..	613	227.4	10	15	27	48	(NA)	96	98	(X)		
		1954..	710	188.8	8	14	26	(NA)	(NA)	97	98	(X)		
		1947..	725	163.3	7	13	23	(NA)	(NA)	99	97	(X)		
3172	Personal leather goods, n.e.c. -----	1982..	239	411.4	30	43	65	85	363	94	83	(X)		
		1977..	253	366.8	38	49	67	86	(NA)	96	91	(X)		
		1972..	238	242.2	37	47	66	84	(NA)	94	91	(X)		
		1970..	(NA)	235.7	31	41	(NA)	(NA)	(NA)	(NA)	(NA)	10		
		1967..	293	186.2	33	44	60	78	(NA)	94	92	(X)		
		1966..	(NA)	195.8	32	45	(NA)	(NA)	(NA)	(NA)	(NA)	6		
		1963..	325	159.0	31	45	60	78	(NA)	96	92	(X)		
3199	Leather goods, n.e.c. <sup>81</sup> -----	1982..	400	327.4	16	26	46	68	144	96	94	(X)		
		1977..	512	284.2	13	24	44	65	(NA)	94	95	(X)		
		1972..	433	161.3	17	26	43	63	(NA)	92	90	(X)		
		1970..	(NA)	118.0	20	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	10		
		1967..	358	96.5	19	28	45	67	(NA)	94	87	(X)		
		1966..	(NA)	(90.9)	19	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	14		
		1963..	365	67.1	17	26	44	66	(NA)	94	82	(X)		
<sup>82</sup> 1958..	429	54.4	14	21	(NA)	(NA)	(NA)	96	84	(X)				

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			Total (million dollars)	Percent accounted for by <sup>4</sup> —								
				4 largest companies	8 largest companies	20 largest companies	50 largest companies					
32	STONE, CLAY, AND GLASS PRODUCTS											
3211	Flat glass -----	1982-- 1977-- 1972-- 1970-- 1967--  1966-- 1963-- 1958-- 1954--	8349 8343 11 (NA) 8339  (NA) 11 13 16	1 665.5 1 576.6 937.1 669.6 611.3  638.1 549.4 382.7 370.5	85 90 92 92 94  96 94 92 90	(D) (D) (D) (S) 98  99+ 99+ 99	(D) 99+ 100 (NA) 99  (NA) 100 100 100	2 032 (NA) (NA) (NA) (NA)  (NA) (NA) (NA) (NA)	5895 5890 5885 (NA) 85  (NA) (D) (D) 90	(D) (D) (D) (NA) (D)  (NA) (D) (D) (D)	(X) (X) (X) 2 (X)  2 (X) (X) (X) (X)	
3221	Glass containers -----	1982-- 1977-- 1972-- 1970-- 1967--  1966-- 1963-- 1958-- 1954-- 1947--	41 31 27 (NA) 39  (NA) 40 42 38 41	5 216.8 3 664.2 2 126.5 1 863.9 1 352.4  1 207.5 1 004.5 855.8 635.1 422.6	50 54 55 57 60  59 55 58 63 63	73 75 76 78 75  74 72 75 78 79	98 98 98 (NA) 95  (NA) 92 93 92 93	99+ 100 100 (NA) 100  (NA) 100 100 100 100	966 (NA) (NA) (NA) (NA)  (NA) (NA) (NA) (NA) (NA)	99 99 99 (NA) 99  (NA) 99 99 98 (D)	99+ 99 99 (NA) 99  (NA) 99 99 99 (D)	(X) (X) (X) 1 (X)  2 (X) (X) (X) (X) (X)
3229	Pressed and blown glass, n.e.c. -----	1982-- 1977-- 1972-- 1970-- 1967--  1966-- 1963-- 1958-- 1954-- 1947--	278 325 211 (NA) 139  (NA) 75 111 255 107	2 724.0 2 120.1 1 267.3 1 052.0 886.2  926.6 630.9 441.0 411.3 234.8	61 61 66 67 71  72 68 64 67 51	80 78 82 (NA) 83  85 81 79 77 65	94 92 93 (NA) 93  (NA) 93 90 88 80	98 97 98 (NA) 99  (NA) 99 96 (NA) (NA)	1 107 (NA) (NA) (NA) (NA)  (NA) (NA) (NA) (NA) (NA)	97 97 96 (NA) 97  (NA) 96 98 98 96	77 84 83 (NA) 80  (NA) 97 98 96 91	(X) (X) (X) 1 (X)  2 (X) (X) (X) (X) (X)
3231	Products of purchased glass -----	1982-- 1977-- 1972-- 1970-- 1967-- 1966-- 1963--	1 228 1 000 842 (NA) 845 (NA) 1 016	2 976.5 1 842.4 1 330.1 959.8 794.7 754.1 627.3	30 31 43 43 42 40 43	38 39 53 51 50 50 49	50 53 65 (NA) 61 (NA) (NA) 59	66 68 77 (NA) 74 (NA) (NA) 70	314 5395 5395 5390 (NA) (NA) (NA)	5395 (D) (D) (D) 90 (NA) (NA) (D)	(D) (X) (X) (NA) (D) (NA) (D)	(X) (X) (X) 2 (X) 3 (X)
3241	Cement, hydraulic -----	1982-- 1977-- 1972-- 1970-- 1967--  1966-- 1963-- 1958-- 1954-- 1947-- 1935--	119 87 75 (NA) 66  (NA) 55 62 67 73 (NA)	3 542.0 3 042.3 1 791.2 1 376.3 1 246.5  1 253.4 1 176.9 1 069.4 811.1 408.9 (NA)	31 24 26 27 29  30 29 32 31 30 29	52 41 46 48 49  51 49 50 48 45 44	81 74 79 (NA) 82  (NA) 82 78 73 70 (NA)	99 99 99+ (NA) 99+  (NA) 99+ 99 99 (NA)	469 (NA) (NA) (NA) (NA)  (NA) (NA) (NA) (NA) (NA)	98 99 99 (NA) 99  (NA) 99 99 99 (NA)	99 99 99 (NA) 99  (NA) 100 100 100 100 (NA)	(X) (X) (X) 1 (X)  2 (X) (X) (X) (X) (X)
3251	Brick and structural clay tile -----	1982-- 1977-- 1972-- 1970-- 1967--  1966-- 1963-- 1958-- 1954-- 1947--	195 250 314 (NA) 377  (NA) 401 471 510 574	657.3 777.7 513.0 401.5 362.0  386.8 325.1 278.5 250.4 144.5	24 21 17 (S) 14  13 12 12 13 10	35 31 26 (S) 22  21 19 20 20 17	53 48 42 (NA) 35  (NA) 33 33 34 30	76 70 64 (NA) 57  (NA) 54 50 (NA) (NA)	263 (NA) (NA) (NA) (NA)  (NA) (NA) (NA) (NA) (NA)	98 97 98 (NA) 98  (NA) 98 96 96 95	99 99 99 (NA) 99  (NA) 98 98 98 97	(X) (X) (X) 7 (X)  5 (X) (X) (X) (X) (X)
3253	Ceramic wall and floor tile -----	1982-- 1977-- 1972-- 1970-- 1967-- 1966-- 1963--	77 62 64 (NA) 57 (NA) 71	406.9 252.5 175.6 154.1 160.5 162.1 164.7	64 60 56 56 52 51 49	79 79 71 78 76 74 69	95 96 90 (NA) 94 (NA) 88	99+ 100 99+ (NA) 99+ (NA) 99+	1 555 (NA) (NA) (NA) (NA) (NA) (NA)	100 99 98 (NA) 93 (NA) 95	97 95 96 (NA) 99 (NA) 99	(X) (X) (X) 1 (X) 2 (X)
3255	Clay refractories -----	1982-- 1977-- 1972-- 1970-- 1967--  1966-- 1963-- 1958-- 1954-- 1947--	104 98 86 (NA) 83  (NA) 80 104 113 108	670.3 607.2 336.0 332.8 246.1  267.1 192.2 157.5 136.4 109.3	42 47 49 43 44  41 41 43 43 41	63 67 68 63 64  62 60 61 60 57	83 86 89 (NA) 86  (NA) 83 81 79 76	96 98 99 (NA) 99  (NA) 98 95 (NA)	648 (NA) (NA) (NA) (NA)  (NA) (NA) (NA) (NA) (NA)	92 89 87 (NA) 92  (NA) 91 93 92 93	94 95 92 (NA) 92  (NA) 93 95 95 94	(X) (X) (X) 3 (X)  4 (X) (X) (X) (X)
3259	Structural clay products, n.e.c. -----	1982-- 1977-- 1972-- 1970-- 1967-- 1966-- 1963--	67 94 88 (NA) 110 (NA) 126	133.6 214.6 180.7 161.6 152.9 155.7 159.7	46 40 39 36 31 33 36	66 60 66 58 51 52 55	90 85 88 (NA) 79 (NA) 79 94	99+ 97 99 (NA) 95 (NA) (NA) 94	944 (NA) (NA) (NA) (NA) (NA) (NA)	98 94 95 (NA) 91 (NA) 89	96 92 96 (NA) 96 (NA) 95	(X) (X) (X) 4 (X) 1 (X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
32	STONE, CLAY, AND GLASS PRODUCTS—Con.										
3261	Vitreous plumbing fixtures -----	1982.. 41	474.0	63	85	99	100	1 360	91	99	(X)
		1977.. 54	411.4	62	82	98	100	(NA)	92	95	(X)
		1972.. 42	270.0	58	83	99	100	(NA)	90	92	(X)
		1970.. (NA)	209.7	57	82	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 34	170.0	62	84	99	100	(NA)	95	96	(X)
		1966.. (NA)	180.7	56	77	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1963.. 34	155.7	57	78	98	100	(NA)	97	97	(X)
		1958.. 35	130.8	54	75	96	100	(NA)	97	97	(X)
		1954.. 25	116.3	65	84	99	100	(NA)	99	99	(X)
		1947.. 26	68.1	58	82	99+	100	(NA)	98	99	(X)
3262	Vitreous china food utensils -----	1982.. 31	241.6	67	90	99	100	1 562	84	98	(X)
		1977.. 26	170.7	71	94	99+	100	(NA)	80	97	(X)
		1972.. 32	81.9	75	90	99	100	(NA)	5390	88	(X)
		1967.. 35	67.2	70	88	98	100	(NA)	5390	89	(X)
		1966.. (NA)	60.0	75	93	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 26	51.0	69	88	99+	100	(NA)	5390	91	(X)
		1958.. 26	47.3	60	80	99	100	(NA)	96	96	(X)
		1954.. 32	44.5	55	73	97	110	(NA)	95	96	(X)
		1947.. 26	43.2	56	75	99	100	(NA)	97	96	(X)
3263	Fine earthenware food utensils -----	1982.. 38	87.6	63	81	98	100	1 392	87	82	(X)
		1977.. 22	81.3	68	(D)	(D)	100	(NA)	85	76	(X)
		1972.. 17	74.3	65	90	100	(X)	(NA)	5370	97	(X)
		1970.. (NA)	48.7	62	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 20	47.1	61	87	100	100	(NA)	86	86	(X)
		1966.. (NA)	47.6	61	87	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 20	59.0	57	83	100	(X)	(NA)	92	91	(X)
		1958.. 29	49.4	43	69	98	100	(NA)	98	91	(X)
		1954.. 46	66.4	37	57	88	100	(NA)	98	92	(X)
		1947.. 74	72.1	38	57	87	(NA)	(NA)	92	97	(X)
3264	Porcelain electrical supplies -----	1982.. 79	528.0	47	63	83	98	689	85	87	(X)
		1977.. 77	367.5	48	64	84	98	(NA)	86	82	(X)
		1972.. 74	274.6	46	70	88	99	(NA)	91	95	(X)
		1970.. (NA)	220.1	53	69	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967.. 65	225.0	47	70	90	99+	(NA)	85	98	(X)
		1966.. (NA)	197.1	49	69	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963.. 74	131.8	46	67	88	99+	(NA)	91	95	(X)
		1958.. 57	92.6	46	68	89	99	(NA)	92	93	(X)
		1954.. 42	77.9	46	70	92	100	(NA)	94	87	(X)
		1947.. 47	71.5	44	64	90	100	(NA)	89	93	(X)
3269	Pottery products, n.e.c. -----	1982.. 682	430.6	32	42	56	75	370	98	86	(X)
		1977.. 713	230.0	19	31	48	68	(NA)	95	85	(X)
		1972.. 417	134.0	20	35	55	75	(NA)	97	84	(X)
		1970.. (NA)	104.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	7
		1967.. 424	96.1	28	37	55	75	(NA)	97	87	(X)
		1963.. 449	95.5	32	41	58	75	(NA)	87	89	(X)
3271	Concrete block and brick -----	1982.. 1 039	1 301.8	8	12	19	31	31	95	87	(X)
		1977.. 1 162	1 143.8	4	6	12	23	(NA)	93	85	(X)
		1972.. 1 300	855.7	5	8	14	25	(NA)	93	85	(X)
		1970.. (NA)	652.3	5	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967.. 1 534	550.1	4	7	13	23	(NA)	92	86	(X)
		1966.. (NA)	585.9	4	7	(NA)	(NA)	(NA)	(NA)	(NA)	5
		1963.. 1 786	505.2	5	7	12	22	(NA)	92	84	(X)
3272	Concrete products, n.e.c. -----	1982.. 2 750	3 649.2	10	16	26	39	49	97	95	(X)
		1977.. 3 475	2 736.2	9	14	23	35	(NA)	96	95	(X)
		1972.. 3 198	1 961.4	10	15	24	37	(NA)	96	95	(X)
		1970.. (NA)	1 495.7	11	17	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967.. 3 055	1 201.1	11	17	28	39	(NA)	96	94	(X)
		1966.. (NA)	1 189.7	13	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1963.. 3 130	925.7	17	23	32	42	(NA)	94	94	(X)
3273	Ready-mixed concrete -----	1982.. 4 161	8 163.3	6	9	16	24	18	95	98	(X)
		1977.. 4 317	6 440.6	5	8	14	23	(NA)	93	98	(X)
		1972.. 3 978	4 050.9	6	10	16	25	(NA)	93	98	(X)
		1970.. (NA)	3 142.6	6	10	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967.. 4 032	2 684.2	6	9	16	24	(NA)	93	98	(X)
		1966.. (NA)	2 527.8	5	8	(NA)	(NA)	(NA)	(NA)	(NA)	5
		1963.. 3 999	2 292.5	4	7	13	22	(NA)	92	98	(X)
		1958.. 3 104	1 559.3	4	7	13	21	(NA)	94	97	(X)
3274	Lime -----	1982.. 59	543.2	36	53	80	99+	504	89	92	(X)
		1977.. 64	484.2	35	50	79	99+	(NA)	92	92	(X)
		1972.. 68	238.1	37	53	79	99+	(NA)	89	92	(X)
		1970.. (NA)	201.2	36	54	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967.. 78	176.5	35	54	79	99	(NA)	87	93	(X)
		1966.. (NA)	197.9	31	47	(NA)	(NA)	(NA)	(NA)	(NA)	11
		1963.. 81	164.4	37	56	82	99	(NA)	82	94	(X)
		1958.. 94	129.7	38	57	80	98	(NA)	84	95	(X)
		1954.. 113	109.2	35	53	80	(NA)	(NA)	84	97	(X)
		1947.. 132	72.8	30	47	69	(NA)	(NA)	93	97	(X)
3275	Gypsum products -----	1982.. 70	1 289.2	76	86	97	99+	1 993	93	98	(X)
		1977.. 58	1 000.0	79	91	99	100	(NA)	96	98	(X)
		1972.. 44	640.3	80	93	99+	100	(NA)	95	99	(X)
		1970.. (NA)	419.5	79	91	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967.. 55	387.7	80	93	99+	99+	(NA)	96	98	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
32	STONE, CLAY, AND GLASS PRODUCTS—Con.										
3275	Gypsum products—Con.										
	1966..	(NA)	394.4	80	95	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	60	425.1	84	97	99+	99+	(NA)	97	98	(X)
	1958..	72	350.6	88	96	98	99	(NA)	97	98	(X)
	1954..	48	282.2	90	97	99	100	(NA)	95	98	(X)
	1947..	33	127.5	85	94	99+	100	(NA)	97	98	(X)
3281	Cut stone and stone products -----										
	1982..	698	555.4	23	30	42	55	251	97	98	(X)
	1977..	963	393.0	14	20	30	43	(NA)	96	95	(X)
	1972..	874	304.5	18	24	35	48	(NA)	96	98	(X)
	1970..	(NA)	248.3	20	28	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967..	776	236.4	18	27	37	51	(NA)	95	99	(X)
	1966..	(NA)	224.2	17	25	(NA)	(NA)	(NA)	(NA)	(NA)	14
	1963..	857	217.2	20	28	38	51	(NA)	94	99	(X)
	1958..	959	198.5	16	24	32	44	(NA)	96	97	(X)
	1954..	961	181.8	12	21	30	(NA)	(NA)	93	99	(X)
	1947..	629	67.3	8	13	21	(NA)	(NA)	100	98	(X)
3291	Abrasive products -----										
	1982..	326	2 750.7	63	71	80	88	1 688	83	95	(X)
	1977..	353	1 955.8	58	65	77	87	(NA)	90	97	(X)
	1972..	335	888.1	49	60	74	87	(NA)	93	88	(X)
	1970..	(NA)	772.8	48	58	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	320	725.3	48	57	71	85	(NA)	91	85	(X)
	1966..	(NA)	1 015.6	56	63	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963..	340	704.2	58	67	77	88	(NA)	(D)	95	(X)
	1958..	318	466.6	58	68	77	88	(NA)	83	96	(X)
	1954..	290	332.5	50	58	71	(NA)	(NA)	94	87	(X)
	1947..	236	225.4	49	56	72	(NA)	(NA)	94	86	(X)
	1935..	(NA)	(NA)	67	74	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3292	Asbestos products <sup>84</sup> -----										
	1982..	77	842.8	51	70	92	99	914	92	91	(X)
	1977..	86	882.1	42	64	90	98	(NA)	92	81	(X)
	1972..	88	763.4	50	71	91	99	(NA)	91	88	(X)
	1970..	(NA)	587.0	54	75	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	81	575.0	55	75	94	99+	(NA)	93	90	(X)
	1966..	(NA)	591.1	56	74	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	73	509.2	56	76	95	99+	(NA)	95	91	(X)
	1958..	69	433.3	59	76	95	99	(NA)	89	92	(X)
	1954..	74	346.2	60	77	( <sup>85</sup> )	( <sup>85</sup> )	(NA)	87	93	(X)
	1947..	85	206.2	( <sup>85</sup> )	( <sup>85</sup> )	( <sup>85</sup> )	( <sup>85</sup> )	(NA)	87	90	(X)
3293	Gaskets, packing, and sealing devices <sup>86</sup> -----										
	1982..	409	1 666.0	18	32	55	72	190	93	89	(X)
	1977..	384	1 267.1	25	39	58	77	(NA)	93	89	(X)
	1972..	346	665.4	27	43	60	77	(NA)	89	81	(X)
3295	Minerals, ground or treated -----										
	1982..	279	1 269.9	30	43	63	83	342	98	93	(X)
	1977..	318	957.3	27	42	65	82	(NA)	96	90	(X)
	1972..	345	412.0	25	36	54	75	(NA)	95	89	(X)
	1970..	(NA)	384.8	25	36	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967..	382	280.9	26	36	56	76	(NA)	96	89	(X)
	1966..	(NA)	292.1	24	39	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963..	313	204.4	24	38	59	79	(NA)	94	86	(X)
3296	Mineral wool -----										
	1982..	130	2 281.1	75	87	95	99	2 081	97	97	(X)
	1977..	95	1 790.5	72	85	95	99+	(NA)	93	96	(X)
	1972..	66	755.4	75	89	97	99+	(NA)	93	93	(X)
	1970..	(NA)	524.9	73	85	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	77	454.4	71	84	95	99	(NA)	92	95	(X)
	1966..	(NA)	461.0	71	83	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1963..	89	391.9	67	83	95	99	(NA)	90	96	(X)
3297	Nonclay refractories -----										
	1982..	77	691.0	47	66	91	99	733	86	82	(X)
	1977..	74	680.2	46	67	89	99	(NA)	92	83	(X)
	1972..	61	343.6	42	65	90	99+	(NA)	94	84	(X)
	1970..	(NA)	353.8	38	60	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	59	307.1	38	58	89	99+	(NA)	90	88	(X)
	1966..	(NA)	333.1	42	61	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	51	250.2	49	66	91	(D)	(NA)	94	88	(X)
3299	Nonmetallic mineral products, n.e.c. -----										
	1982..	569	422.3	34	49	65	78	427	95	87	(X)
	1977..	681	387.3	37	48	65	78	(NA)	93	89	(X)
	1972..	480	166.5	28	36	53	70	(NA)	94	90	(X)
	1970..	(NA)	97.2	41	53	(NA)	(NA)	(NA)	(NA)	(NA)	10
	1967..	325	99.9	37	49	66	82	(NA)	82	89	(X)
	1966..	(NA)	115.9	35	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	11
	1963..	313	96.2	37	48	66	82	(NA)	86	96	(X)
33	PRIMARY METAL INDUSTRIES										
3312	Blast furnaces and steel mills -----										
	1982..	211	<sup>1011</sup> 763.3	42	64	82	95	650	98	79	(X)
	1977..	395	<sup>1015</sup> 331.9	45	65	84	95	(NA)	<sup>5397</sup>	(D)	(X)
	1972..	241	<sup>1010</sup> 304.7	45	65	84	96	(NA)	<sup>5395</sup>	(D)	(X)
	1970..	(NA)	<sup>109</sup> 328.3	47	65	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	200	<sup>108</sup> 910.1	48	66	83	96	(NA)	(NA)	(NA)	1

See footnotes at end of table.



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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
33	PRIMARY METAL INDUSTRIES—Con.										
3312	Blast furnaces and steel mills—Con.										
	1966..	(NA)	<sup>109</sup> 643.6	49	66	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	161	<sup>107</sup> 699.5	48	67	85	95	(NA)	(NA)	(NA)	(X)
	1958..	148	<sup>105</sup> 980.0	53	70	84	96	(NA)	(NA)	(NA)	(X)
	<sup>87</sup> 1954..	(NA)	<sup>105</sup> 014.4	55	71	86	(NA)	(NA)	(NA)	(NA)	(X)
	<sup>87</sup> 1947..	(NA)	<sup>102</sup> 844.6	50	66	81	(NA)	(NA)	(NA)	(NA)	(X)
3313	Electrometallurgical products -----										
	1982..	32	707.5	51	74	99	100	1 159	97	87	(X)
	1977..	28	930.6	69	84	99+	100	(NA)	(D)	90	(X)
	1972..	27	550.1	74	90	99+	100	(NA)	<sup>5395</sup> –100	<sup>8897</sup>	(X)
	1970..	(NA)	515.7	77	93	(NA)	(NA)	(NA)	(NA)	1	(X)
	1967..	21	467.9	74	90	(D)	100	(NA)	<sup>5390</sup> –100	<sup>8882</sup>	(X)
	1966..	(NA)	509.3	74	91	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	20	382.1	79	95	100	(X)	(NA)	85–90	<sup>8877</sup>	(X)
	1958..	19	397.3	73	91	100	(X)	(NA)	96	<sup>8876</sup>	(X)
	1954..	17	271.8	77	93	100	(X)	(NA)	92	<sup>8868</sup>	(X)
	1947..	10	150.9	88	(D)	100	(X)	(NA)	88	(NA)	(X)
3315	Steel wire and related products -----										
	1982..	252	2 420.9	22	32	54	78	241	97	44	(X)
	1977..	262	2 258.6	21	32	52	76	(NA)	95	47	(X)
	1972..	234	1 227.7	18	30	52	77	(NA)	94	42	(X)
	1970..	(NA)	965.3	26	38	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	200	845.2	24	34	53	78	(NA)	90	37	(X)
	1966..	(NA)	799.6	26	38	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	171	592.3	28	39	59	85	(NA)	89	30	(X)
3316	Cold finishing of steel shapes -----										
	1982..	146	3 005.1	42	58	77	95	659	92	32	(X)
	1977..	118	2 713.2	37	54	80	97	(NA)	95	25	(X)
	1972..	85	1 635.7	40	56	82	99	(NA)	91	29	(X)
	1970..	(NA)	1 122.1	35	52	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967..	77	1 038.7	34	51	77	98	(NA)	90	24	(X)
	1966..	(NA)	975.7	34	51	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	59	751.6	36	55	82	99+	(NA)	94	20	(X)
3317	Steel pipe and tubes -----										
	1982..	170	3 762.2	24	39	64	87	279	94	47	(X)
	1977..	130	2 681.4	24	39	68	91	(NA)	95	44	(X)
	1972..	115	1 292.1	23	40	70	92	(NA)	93	42	(X)
	1970..	(NA)	1 026.9	25	40	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	123	1 148.6	26	41	72	92	(NA)	89	38	(X)
	1966..	(NA)	1 072.3	26	43	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	114	809.0	27	42	71	93	(NA)	91	37	(X)
3321	Gray iron foundries <sup>89</sup> -----										
	1982..	801	6 202.2	29	37	53	69	348	94	91	(X)
	1977..	865	7 388.7	34	44	60	73	(NA)	96	88	(X)
	1972..	893	3 876.5	34	45	59	71	(NA)	94	87	(X)
	1970..	(NA)	3 034.9	30	40	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	969	2 637.8	27	36	50	64	(NA)	93	86	(X)
	1966..	(NA)	2 728.2	27	37	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	1 062	1 984.9	28	37	51	65	(NA)	93	88	(X)
	1958..	1 199	1 406.4	24	33	47	61	(NA)	95	87	(X)
	1954..	1 321	1 418.9	26	34	46	(NA)	(NA)	94	87	(X)
	1947..	1 554	1 173.0	16	24	35	(NA)	(NA)	92	87	(X)
3322	Malleable iron foundries -----										
	1982..	46	323.2	61	77	94	100	1 949	89	77	(X)
	1977..	58	721.9	54	72	88	99+	(NA)	86	93	(X)
	1972..	64	507.9	52	66	83	99	(NA)	87	91	(X)
	1970..	(NA)	403.0	42	56	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	72	438.3	47	59	77	97	(NA)	85	89	(X)
	1966..	(NA)	449.4	48	60	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	76	317.5	46	58	76	96	(NA)	87	87	(X)
	1958..	73	210.8	42	56	73	96	(NA)	87	90	(X)
	1954..	71	212.4	50	59	76	(NA)	(NA)	86	89	(X)
	1947..	68	184.4	35	48	69	(NA)	(NA)	88	91	(X)
3324	Steel investment foundries -----										
	1982..	117	1 024.6	49	60	74	92	1 119	91	96	(X)
	1977..	80	407.5	56	66	81	97	(NA)	93	86	(X)
	1972..	67	262.2	56	67	87	98	(NA)	86	94	(X)
3325	Steel foundries, n.e.c. <sup>12</sup> -----										
	1982..	290	2 091.4	21	31	52	75	193	90	92	(X)
	1977..	287	2 312.1	26	38	56	77	(NA)	87	91	(X)
	1972..	225	1 067.4	24	37	58	79	(NA)	89	88	(X)
3331	Primary copper -----										
	1982..	7	<sup>10440</sup> 4.4	(D)	(D)	(X)	(X)	2 673	91	<sup>5369</sup>	(X)
	1977..	8	<sup>10904</sup> 0.3	87	100	(X)	(X)	(NA)	<sup>5386</sup>	83	(X)
	1972..	11	<sup>10487</sup> 8	72	(D)	100	(X)	(NA)	<sup>5389</sup>	<sup>5382</sup>	(X)
	1970..	(NA)	<sup>10673</sup> 0	75	98	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	15	<sup>10262</sup> 6	77	98	100	(X)	(NA)	<sup>5393</sup>	<sup>5374</sup>	(X)
	1966..	(NA)	<sup>10362</sup> 5	71	97	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	13	<sup>10285</sup> 5	78	98	100	(X)	(NA)	(NA)	(NA)	(X)
	1958..	11	<sup>10161</sup> 7	87	99	100	(X)	(NA)	(NA)	(NA)	(X)
3332	Primary lead -----										
	1982..	5	<sup>1094</sup> 8	(D)	(D)	(X)	(X)	(D)	(D)	44	(X)
	1977..	4	<sup>10189</sup> 5	100	(X)	(X)	(X)	(NA)	(NA)	(NA)	(X)
	1972..	12	<sup>10128</sup> 7	93	99+	100	(X)	(NA)	(NA)	(NA)	(X)
	1970..	(NA)	<sup>1080</sup> 6	(D)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	14	<sup>1048</sup> 3	(D)	(D)	100	(X)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
33	PRIMARY METAL INDUSTRIES—Con.										
3332	Primary lead—Con.										
	1966...	(NA)	1065.0	(D)	100	(X)	(X)	(NA)	(NA)	(NA)	2
	1963...	6	1024.9	(D)	100	(X)	(X)	(NA)	(NA)	(NA)	(X)
	1958...	5	1024.4	(D)	100	(X)	(X)	(NA)	(NA)	(NA)	(X)
	1954...	5	1030.8	(D)	100	(X)	(X)	(NA)	(NA)	(NA)	(X)
	1947...	6	1035.9	(D)	100	(X)	(X)	(NA)	(NA)	(NA)	(X)
3333	Primary zinc -----										
	1982...	8	334.0	75	100	(X)	(X)	1 666	88	53	(X)
	1977...	8	430.7	81	100	(X)	(X)	(NA)	83	67	(X)
	1972...	11	376.4	66	(D)	100	(X)	(NA)	87	8870	(X)
	1970...	(NA)	372.5	57	90	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967...	11	332.8	59	100	(X)	(X)	(NA)	88	8880	(X)
	1966...	(NA)	379.9	60	91	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963...	11	281.5	57	90	100	(X)	(NA)	92	8881	(X)
	1958...	11	203.4	62	93	100	(X)	(NA)	90	8876	(X)
	1954...	13	230.5	56	87	100	(X)	(NA)	87	(NA)	(X)
	1947...	14	191.0	53	82	100	(X)	(NA)	(NA)	(NA)	(X)
3334	Primary aluminum -----										
	1982...	15	5 037.1	64	88	100	(X)	1 704	97	73	(X)
	1977...	12	4 647.8	76	93	100	(X)	(NA)	95	70	(X)
	1972...	12	1 959.8	79	92	100	(X)	(NA)	94	8876	(X)
	1970...	(NA)	1 757.9	(D)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967...	10	1 608.7	(D)	(D)	100	(X)	(NA)	97	8875	(X)
	1966...	(NA)	1 496.2	(D)	100	(X)	(X)	(NA)	(NA)	(NA)	2
	1963...	7	1 090.0	(D)	100	(X)	(X)	(NA)	100	8875	(X)
	1958...	6	801.7	(D)	100	(X)	(X)	(NA)	100	8876	(X)
	1954...	3	604.1	100	(X)	(X)	(X)	(NA)	100	8878	(X)
	1947...	3	161.0	100	(X)	(X)	(X)	(NA)	(NA)	(NA)	(X)
3339	Primary nonferrous metals, n.e.c. -----										
	1982...	85	2 312.9	79	89	98	99+	2 858	78	50	(X)
	1977...	81	963.9	56	76	96	99+	(NA)	90	44	(X)
	1972...	72	395.9	49	70	92	99+	(NA)	84	8827	(X)
	1970...	(NA)	492.3	61	78	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967...	41	284.4	60	80	98	100	(NA)	87	8840	(X)
	1966...	(NA)	309.2	53	71	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963...	32	212.2	61	78	96	100	(NA)	83	8839	(X)
	1958...	24	96.5	62	86	99	100	(NA)	92	8824	(X)
3341	Secondary nonferrous metals -----										
	1982...	396	4 851.9	25	35	56	76	231	97	31	(X)
	1977...	393	3 558.0	22	36	55	74	(NA)	97	26	(X)
	1972...	324	2 097.2	24	40	62	81	(NA)	98	8828	(X)
	1970...	(NA)	1 802.6	26	41	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967...	351	1 586.0	26	42	62	79	(NA)	89	8826	(X)
	1966...	(NA)	1 709.2	29	44	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963...	406	1 045.5	29	42	58	75	(NA)	94	8826	(X)
	1958...	349	648.2	26	41	59	76	(NA)	93	8830	(X)
3351	Copper rolling and drawing -----										
	1982...	102	3 270.0	35	55	84	98	503	90	95	(X)
	1977...	102	4 013.8	40	63	85	98	(NA)	85	92	(X)
	1972...	103	3 098.8	39	61	83	97	(NA)	89	93	(X)
	1970...	(NA)	2 920.9	44	65	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967...	86	2 391.1	41	65	85	98	(NA)	90	93	(X)
	1966...	(NA)	2 846.3	43	67	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963...	81	1 657.5	45	67	87	99	(NA)	90	91	(X)
3353	Aluminum sheet, plate, and foil -----										
	1982...	39	7 213.8	74	90	99+	100	1 772	95	99	(X)
	1977...	31	5 970.7	72	88	99+	100	(NA)	92	99	(X)
	1972...	24	2 685.2	69	84	99+	100	(NA)	85	99	(X)
3354	Aluminum extruded products -----										
	1982...	134	2 673.1	34	51	73	91	412	89	91	(X)
	1977...	133	2 050.0	38	54	78	93	(NA)	88	92	(X)
	1972...	133	1 078.3	42	56	76	93	(NA)	85	88	(X)
3355	Aluminum rolling and drawing, n.e.c. <sup>12</sup> -----										
	1982...	24	670.8	83	97	100	(X)	2 564	77	7	(X)
	1977...	18	1 001.0	81	95	100	(X)	(NA)	91	13	(X)
	1972...	14	343.4	73	96	100	(X)	(NA)	86	10	(X)
3356	Nonferrous rolling and drawing, n.e.c. -----										
	1982...	144	3 418.3	38	59	83	96	564	94	92	(X)
	1977...	153	2 596.5	42	56	79	95	(NA)	94	93	(X)
	1972...	136	1 244.6	43	59	82	95	(NA)	84	87	(X)
	1970...	(NA)	1 047.8	47	66	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967...	115	984.0	49	67	85	98	(NA)	89	8884	(X)
	1966...	(NA)	1 051.1	46	68	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963...	108	641.0	46	66	86	97	(NA)	84	8881	(X)
	1958...	120	467.6	43	64	84	97	(NA)	77	8882	(X)
3357	Nonferrous wire drawing and insulating -----										
	1982...	271	8 216.9	30	42	65	84	375	97	88	(X)
	1977...	245	6 595.4	40	54	74	90	(NA)	94	93	(X)
	1972...	202	4 412.3	41	58	80	92	(NA)	94	8889	(X)
	1970...	(NA)	4 143.8	45	62	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967...	206	3 591.4	39	55	76	92	(NA)	93	8889	(X)
	1966...	(NA)	3 711.1	39	56	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963...	210	2 117.9	44	62	79	92	(NA)	91	8886	(X)
3361	Aluminum foundries -----										
	1982...	994	3 013.6	16	22	34	51	111	88	92	(X)
	1977...	994	2 459.1	23	29	42	58	(NA)	87	92	(X)
	1972...	973	1 269.9	23	30	42	58	(NA)	84	89	(X)
	1970...	(NA)	1 036.2	23	30	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967...	970	920.5	24	31	42	55	(NA)	83	85	(X)
	1966...	(NA)	916.8	25	32	(NA)	(NA)	(NA)	(NA)	(NA)	8
	1963...	926	640.2	33	40	50	64	(NA)	81	83	(X)

See footnotes at end of table.



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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>5</sup>	Primary product speciali- zation ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
33	PRIMARY METAL INDUSTRIES—Con.										
3362	Brass, bronze, and copper foundries ----- 1982..	487	702.2	16	23	38	57	122	88	85	(X)
	1977..	476	553.3	16	23	37	57	(NA)	85	74	(X)
	1972..	490	465.3	20	28	42	60	(NA)	84	81	(X)
	1970..	(NA)	474.3	21	29	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967..	516	445.2	18	28	45	63	(NA)	83	82	(X)
	1966..	(NA)	451.7	20	28	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963..	535	287.5	18	27	44	61	(NA)	84	78	(X)
3369	Nonferrous foundries, n.e.c. ----- 1982..	348	887.5	28	37	51	72	312	86	79	(X)
	1977..	359	813.7	20	29	47	68	(NA)	85	77	(X)
	1972..	324	588.6	25	35	52	71	(NA)	83	79	(X)
	1970..	(NA)	487.6	25	37	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967..	352	556.3	29	39	54	73	(NA)	83	82	(X)
	1966..	(NA)	498.3	25	34	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963..	386	302.7	18	26	44	66	(NA)	78	75	(X)
3398	Metal heat treating ----- 1982..	669	1 128.2	21	30	41	55	159	95	97	(X)
	1977..	682	744.9	24	32	41	54	(NA)	(NA)	(NA)	(X)
	1972..	885	467.4	16	24	35	48	(NA)	( <sup>90</sup> )	( <sup>90</sup> )	(X)
3399	Primary metal products, n.e.c. <sup>12</sup> ----- 1982..	238	938.1	35	52	73	89	442	87	82	(X)
	1977..	406	750.6	24	36	56	77	(NA)	94	70	(X)
	1972..	129	348.3	26	40	62	85	(NA)	92	74	(X)
34	FABRICATED METAL PRODUCTS										
3411	Metal cans ----- 1982..	168	11 132.8	50	68	89	98	790	98	99	(X)
	1977..	153	8 242.8	59	74	90	98	(NA)	96	98	(X)
	1972..	134	4 510.8	66	79	92	99	(NA)	96	99	(X)
	1970..	(NA)	3 912.7	72	83	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	96	2 890.6	73	84	94	99	(NA)	90	98	(X)
	1966..	(NA)	2 631.3	71	83	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	99	2 075.0	74	85	95	99	(NA)	97	98	(X)
	1958..	84	1 803.7	80	89	97	99	(NA)	95	96	(X)
	1954..	<sup>91</sup> 109	1 366.8	80	88	96	(NA)	(NA)	98	99	(X)
	1947..	102	678.9	78	86	94	(NA)	(NA)	97	99	(X)
	1935..	(NA)	(NA)	80	85	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3412	Metal barrels, drums, and pails (1967 industry 3491) ----- 1982..	115	1 038.7	33	50	74	94	436	93	93	(X)
	1977..	120	937.1	34	47	71	94	(NA)	94	90	(X)
	1972..	99	461.3	38	52	75	97	(NA)	97	86	(X)
	1970..	(NA)	400.9	39	54	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	91	370.7	36	54	77	97	(NA)	92	88	(X)
	1966..	(NA)	361.7	39	55	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963..	95	303.4	40	56	77	97	(NA)	92	86	(X)
3421	Cutlery ----- 1982..	123	938.0	49	59	78	97	1 035	96	90	(X)
	1977..	119	711.4	53	65	83	97	(NA)	92	94	(X)
	1972..	123	427.5	55	67	83	97	(NA)	91	94	(X)
	1970..	(NA)	354.7	61	71	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967..	138	378.5	69	77	87	97	(NA)	79	95	(X)
	1966..	(NA)	373.6	66	76	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963..	156	283.4	66	76	87	96	(NA)	89	97	(X)
	1958..	181	176.8	53	65	78	92	(NA)	91	96	(X)
	1954..	179	169.8	49	61	77	(NA)	(NA)	88	96	(X)
	1947..	192	142.6	41	54	73	(NA)	(NA)	93	94	(X)
3423	Hand and edge tools, n.e.c. ----- 1982..	703	2 915.5	30	41	58	75	303	90	91	(X)
	1977..	662	2 279.2	25	38	56	76	(NA)	91	90	(X)
	1972..	582	1 233.1	23	39	58	77	(NA)	89	88	(X)
	1970..	(NA)	970.6	25	37	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	630	813.5	22	34	53	73	(NA)	93	85	(X)
	1966..	(NA)	808.1	22	35	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963..	681	565.6	21	34	52	72	(NA)	87	84	(X)
	<sup>92</sup> 1958..	(NA)	402.4	19	30	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3425	Hand saws and saw blades ----- 1982..	119	487.3	47	65	85	96	722	83	86	(X)
	1977..	105	363.3	53	69	86	97	(NA)	86	77	(X)
	1972..	81	194.4	51	74	88	98	(NA)	85	77	(X)
	1970..	(NA)	177.8	47	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	14
	1967..	74	154.3	51	71	89	99	(NA)	80	82	(X)
	1966..	(NA)	149.9	55	76	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963..	70	102.8	48	66	90	99	(NA)	78	85	(X)
	1958..	82	84.8	49	66	89	98	(NA)	82	90	(X)
	1954..	95	83.7	56	70	89	(NA)	(NA)	71	90	(X)
	1947..	81	70.4	66	75	90	(NA)	(NA)	78	87	(X)
	1935..	(NA)	(NA)	63	76	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3429	Hardware, n.e.c. ----- 1982..	1 085	5 740.9	35	42	54	67	717	96	94	(X)
	1977..	1 063	5 202.6	39	45	57	72	(NA)	94	94	(X)
	1972..	963	3 239.4	35	43	57	71	(NA)	94	94	(X)
	1970..	(NA)	2 485.8	30	38	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	979	2 368.3	38	45	58	70	(NA)	91	95	(X)
	1966..	(NA)	2 343.8	38	45	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	1 025	1 785.1	39	45	57	70	(NA)	91	93	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
34	FABRICATED METAL PRODUCTS—Con.										
3431	Metal sanitary ware ----- 1982..	79	620.3	46	65	92	99	894	80	97	(X)
	1977..	96	477.6	54	68	88	99	(NA)	82	92	(X)
	1972..	86	370.2	49	67	87	99	(NA)	84	91	(X)
	1970..	(NA)	369.2	46	65	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	83	251.2	51	69	90	99	(NA)	83	89	(X)
	1966..	(NA)	262.3	47	67	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	75	234.9	49	68	91	99	(NA)	84	91	(X)
3432	Plumbing fittings and brass goods ----- 1982..	162	1 300.5	34	49	72	91	459	97	93	(X)
	1977..	191	1 166.4	33	49	69	90	(NA)	96	92	(X)
	1972..	211	708.2	26	42	66	88	(NA)	90	90	(X)
	1970..	(NA)	465.4	30	46	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967..	210	404.7	28	43	64	88	(NA)	93	86	(X)
	1966..	(NA)	396.3	32	43	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1963..	247	333.8	30	41	60	83	(NA)	90	83	(X)
3433	Heating equipment, except electric <sup>9a</sup> ----- 1982..	875	2 082.5	15	23	39	61	120	90	87	(X)
	1977..	678	1 443.6	14	26	44	69	(NA)	87	84	(X)
	1972..	409	1 058.4	22	31	48	70	(NA)	82	88	(X)
	1970..	(NA)	1 256.7	19	30	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	496	1 069.0	22	33	50	71	(NA)	77	80	(X)
	1966..	(NA)	1 167.3	16	26	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963..	611	1 019.8	16	27	45	66	(NA)	76	81	(X)
3441	Fabricated structural metal ----- 1982..	2 588	8 853.1	10	15	24	36	44	94	95	(X)
	1977..	2 319	5 505.2	10	15	23	35	(NA)	92	92	(X)
	1972..	2 010	3 920.1	10	14	23	36	(NA)	89	93	(X)
	1970..	(NA)	3 139.0	13	18	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	1 865	2 967.8	13	18	26	38	(NA)	89	91	(X)
	1966..	(NA)	2 601.7	14	20	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963..	1 636	1 916.0	15	20	28	41	(NA)	86	89	(X)
3442	Metal doors, sash, and trim ----- 1982..	1 564	4 685.3	11	17	30	47	66	91	94	(X)
	1977..	1 498	3 135.6	8	15	30	48	(NA)	93	91	(X)
	1972..	1 391	2 077.6	12	19	33	50	(NA)	90	91	(X)
	1970..	(NA)	1 588.7	11	17	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967..	1 540	1 413.6	10	16	26	42	(NA)	91	94	(X)
	1966..	(NA)	1 397.2	10	16	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963..	1 712	1 253.8	8	13	23	38	(NA)	88	94	(X)
3443	Fabricated plate work (boiler shops) ----- 1982..	1 743	8 225.3	19	25	35	48	151	93	91	(X)
	1977..	1 683	7 432.4	26	32	43	57	(NA)	89	92	(X)
	1972..	1 349	3 339.0	29	35	46	58	(NA)	92	87	(X)
	1970..	(NA)	2 980.2	30	37	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967..	1 346	2 688.5	30	36	48	59	(NA)	91	85	(X)
	1966..	(NA)	2 323.3	28	35	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963..	1 301	1 623.0	25	34	48	59	(NA)	89	93	(X)
3444	Sheet metal work ----- 1982..	3 579	6 853.9	7	11	21	33	29	92	92	(X)
	1977..	3 222	4 863.5	10	17	28	40	(NA)	92	90	(X)
	1972..	2 959	2 680.0	9	15	24	36	(NA)	90	84	(X)
	1970..	(NA)	2 035.8	9	14	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967..	2 942	1 812.4	10	16	26	39	(NA)	88	83	(X)
	1966..	(NA)	1 834.8	11	17	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963..	3 139	1 303.7	11	16	24	35	(NA)	88	78	(X)
	1958..	3 066	973.8	15	20	27	39	(NA)	88	83	(X)
	1954..	2 363	738.5	19	28	36	(NA)	(NA)	81	80	(X)
	1947..	1 665	420.5	21	29	38	(NA)	(NA)	83	82	(X)
	1935..	(NA)	(NA)	17	26	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3446	Architectural metal work ----- 1982..	1 380	1 367.5	12	21	35	51	83	91	84	(X)
	1977..	1 477	947.1	17	26	41	57	(NA)	90	86	(X)
	1972..	1 431	573.7	14	21	33	48	(NA)	88	81	(X)
	1970..	(NA)	489.0	16	25	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967..	1 360	484.9	28	36	48	62	(NA)	83	77	(X)
	1966..	(NA)	342.0	15	21	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963..	1 326	269.3	13	19	32	50	(NA)	86	71	(X)
3448	Prefabricated metal buildings ----- 1982..	518	2 324.6	21	31	50	73	195	95	95	(X)
	1977..	414	1 779.2	22	34	58	79	(NA)	94	95	(X)
	1972..	145	608.9	35	52	76	93	(NA)	89	90	(X)
3449	Miscellaneous metal work <sup>12</sup> ----- 1982..	401	2 594.6	25	38	55	72	250	88	84	(X)
	1977..	308	1 330.8	28	45	63	82	(NA)	91	78	(X)
	1972..	332	980.4	27	41	60	79	(NA)	91	76	(X)
3451	Screw machine products ----- 1982..	1 744	2 173.1	8	11	17	28	30	96	94	(X)
	1977..	1 727	1 771.7	7	11	18	30	(NA)	96	92	(X)
	1972..	1 780	1 063.8	6	9	16	26	(NA)	96	90	(X)
	1970..	(NA)	1 048.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	7
	1967..	1 847	1 021.5	6	9	17	28	(NA)	96	90	(X)
	1966..	(NA)	949.0	4	7	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963..	1 861	589.0	5	8	15	26	(NA)	97	90	(X)
	1958..	1 784	415.3	9	12	19	30	(NA)	95	86	(X)
	1954..	1 791	401.5	11	15	23	(NA)	(NA)	93	82	(X)
	1947..	1 205	222.0	17	20	29	(NA)	(NA)	94	86	(X)
3452	Bolts, nuts, rivets, and washers ----- 1982..	780	3 661.3	13	23	38	58	102	93	95	(X)
	1977..	723	3 319.5	13	23	40	62	(NA)	94	94	(X)
	1972..	581	2 027.6	16	25	42	66	(NA)	93	91	(X)
	1970..	(NA)	1 646.0	17	27	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967..	577	1 643.9	18	27	47	68	(NA)	94	90	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
34	FABRICATED METAL PRODUCTS—Con.										
3452	Bolts, nuts, rivets, and washers—Con.										
	1966...	(NA)	1 661.8	18	28	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963...	504	1 218.2	18	27	47	68	(NA)	92	90	(X)
	1958...	470	844.5	17	27	45	67	(NA)	88	89	(X)
	1954...	421	699.5	15	25	45	(NA)	(NA)	91	89	(X)
	1947...	339	463.8	20	31	52	(NA)	(NA)	92	86	(X)
3462	Iron and steel forgings-----										
	1982...	336	2 943.5	24	31	47	70	227	89	81	(X)
	1977...	312	2 795.7	25	34	51	74	(NA)	92	84	(X)
	1972...	252	1 416.1	29	40	57	79	(NA)	92	86	(X)
	1970...	(NA)	1 184.5	31	40	(NA)	(NA)	(NA)	(NA)	1	(X)
	1967...	248	1 261.6	30	40	57	77	(NA)	90	87	(X)
	1966...	(NA)	1 273.1	31	42	(NA)	(NA)	(NA)	(NA)	2	(X)
	1963...	248	868.9	30	39	56	77	(NA)	89	86	(X)
	1958...	287	675.4	31	39	56	77	(NA)	86	88	(X)
	1954...	247	595.4	27	38	59	(NA)	(NA)	88	73	(X)
	1947...	240	370.1	24	35	54	(NA)	(NA)	95	77	(X)
	1935...	(NA)	(NA)	21	32	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3463	Nonferrous forgings-----										
	1982...	59	1 093.8	58	75	91	99+	1 291	84	73	(X)
	1977...	43	456.7	77	85	97	100	(NA)	87	67	(X)
	1972...	40	222.5	71	81	96	100	(NA)	84	63	(X)
	1970...	(NA)	326.4	67	80	(NA)	(NA)	(NA)	(NA)	2	(X)
	1967...	37	333.1	77	85	97	100	(NA)	67	54	(X)
	1966...	(NA)	311.4	78	85	(NA)	(NA)	(NA)	(NA)	5	(X)
	1963...	32	165.1	84	91	99	100	(NA)	69	55	(X)
3465	Automotive stampings-----										
	1982...	566	8 777.4	61	66	74	82	1 302	92	88	(X)
	1977...	495	9 739.2	65	70	77	84	(NA)	92	91	(X)
	1972...	388	5 286.0	69	72	79	87	(NA)	92	92	(X)
3466	Crowns and closures-----										
	1982...	48	804.8	57	83	98	100	1 065	92	92	(X)
	1977...	42	536.9	53	73	95	100	(NA)	95	86	(X)
	1972...	42	343.5	49	72	92	100	(NA)	88	83	(X)
3469	Metal stampings, n.e.c. <sup>12</sup> -----										
	1982...	2 718	6 437.7	10	16	24	35	48	88	88	(X)
	1977...	2 544	4 735.7	9	16	26	38	(NA)	88	88	(X)
	1972...	2 283	2 688.8	9	14	23	36	(NA)	86	85	(X)
3471	Plating and polishing-----										
	1982...	3 367	2 731.4	7	11	18	27	23	(90)	(90)	(X)
	1977...	3 344	1 848.5	8	12	18	27	(NA)	(90)	(90)	(X)
	1972...	3 179	1 034.5	5	8	15	24	(NA)	(90)	(90)	(X)
	1970...	(NA)	966.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5	(X)
	1967...	3 170	791.1	5	9	15	24	(NA)	(90)	(90)	(X)
	1966...	(NA)	719.8	5	8	(NA)	(NA)	(NA)	(NA)	2	(X)
	1963...	2 968	517.6	5	8	14	22	(NA)	(90)	(90)	(X)
	1958...	2 588	353.5	5	7	12	21	(NA)	(90)	(90)	(X)
	1954...	2 423	304.4	10	13	20	(NA)	(NA)	(90)	(90)	(X)
	1947...	1 789	180.7	15	20	28	(NA)	(NA)	(90)	(90)	(X)
	1935...	(NA)	(NA)	12	17	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3479	Metal coating and allied services-----										
	1982...	1 524	2 393.4	15	24	40	56	118	(90)	(90)	(X)
	1977...	1 556	1 607.7	22	32	46	59	(NA)	(90)	(90)	(X)
	1972...	1 427	701.8	15	23	36	49	(NA)	(90)	(90)	(X)
	1970...	(NA)	532.3	17	(S)	(NA)	(NA)	(NA)	(NA)	6	(X)
	1967...	1 393	471.3	18	26	37	50	(NA)	(90)	(90)	(X)
	1966...	(NA)	469.1	15	24	(NA)	(NA)	(NA)	(NA)	7	(X)
	1963...	1 227	322.1	17	26	39	54	(NA)	(90)	(90)	(X)
	1958...	986	194.4	21	28	(NA)	(NA)	(NA)	(90)	(90)	(X)
3482	Small arms ammunition <sup>94</sup> -----										
	1982...	59	799.8	87	97	99	100	2 305	96	85	(X)
	1977...	59	436.2	86	97	99	99+	(NA)	95	90	(X)
	1972...	57	366.7	89	95	99	99+	(NA)	97	97	(X)
3483	Ammunition, except for small arms, n.e.c. <sup>94</sup> -----										
	1982...	63	1 757.1	50	69	90	100	1 003	82	76	(X)
	1977...	68	716.5	52	71	93	99	(NA)	81	83	(X)
	1972...	78	1 173.4	44	62	85	99	(NA)	83	84	(X)
3484	Small arms <sup>94</sup> -----										
	1982...	138	1 032.1	51	74	91	99	893	90	99+	(X)
	1977...	105	754.9	58	78	95	99	(NA)	94	99	(X)
	1972...	75	393.5	53	74	96	99+	(NA)	91	98	(X)
3489	Ordnance and accessories, n.e.c. <sup>94</sup> -----										
	1982...	65	1 403.8	59	82	96	99+	1 061	86	64	(X)
	1977...	89	733.8	48	72	91	99+	(NA)	81	68	(X)
	1972...	75	469.5	54	76	93	99+	(NA)	76	67	(X)
3493	Steel springs, except wire-----										
	1982...	123	413.5	43	59	81	94	614	81	59	(X)
	1977...	116	500.5	44	59	84	97	(NA)	84	72	(X)
	1972...	99	331.4	45	62	86	98	(NA)	81	73	(X)
	1970...	(NA)	265.5	43	62	(NA)	(NA)	(NA)	(NA)	2	(X)
	1967...	105	192.4	36	53	82	97	(NA)	88	63	(X)
	1966...	(NA)	162.2	41	62	(NA)	(NA)	(NA)	(NA)	5	(X)
	1963...	91	157.7	44	63	85	98	(NA)	91	67	(X)
3494	Valves and pipe fittings-----										
	1982...	944	9 039.9	13	21	35	55	92	90	90	(X)
	1977...	741	5 662.3	13	21	37	59	(NA)	89	88	(X)
	1972...	643	2 956.9	11	21	41	63	(NA)	89	86	(X)
	1970...	(NA)	2 678.7	14	23	(NA)	(NA)	(NA)	(NA)	2	(X)
	1967...	575	2 274.5	14	23	42	65	(NA)	87	88	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
34	FABRICATED METAL PRODUCTS—Con.										
3494	Valves and pipe fittings—Con.										
	1966--	(NA)	2 209.0	13	23	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	580	1 588.5	13	23	41	62	(NA)	86	85	(X)
	1958--	535	1 196.5	17	27	46	66	(NA)	87	88	(X)
	1954--	523	959.0	17	27	47	(NA)	(NA)	75	86	(X)
	1947--	436	633.8	24	32	50	(NA)	(NA)	82	90	(X)
3495	Wire springs -----										
	1982--	322	1 104.3	29	40	58	76	346	92	93	(X)
	1977--	254	957.7	29	41	58	78	(NA)	92	92	(X)
	1972--	206	611.9	26	38	60	80	(NA)	88	93	(X)
3496	Miscellaneous fabricated wire products <sup>12</sup> -----										
	1982--	1 109	2 358.4	9	15	26	43	51	93	52	(X)
	1977--	1 048	1 435.0	10	16	31	48	(NA)	91	37	(X)
	1972--	1 157	959.7	11	17	29	47	(NA)	93	88.45	(X)
3497	Metal foil and leaf -----										
	1982--	80	1 846.3	56	66	83	98	1 455	81	82	(X)
	1977--	63	895.1	49	66	87	99	(NA)	80	63	(X)
	1972--	54	282.0	45	61	86	99+	(NA)	79	42	(X)
	1970--	(NA)	283.7	45	65	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	59	265.5	43	65	87	99+	(NA)	85	56	(X)
	1966--	(NA)	165.9	43	66	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963--	56	151.6	54	73	90	99+	(NA)	86	41	(X)
3498	Fabricated pipe and fittings-----										
	1982--	704	3 105.8	14	24	43	65	123	97	94	(X)
	1977--	513	1 872.7	18	29	49	70	(NA)	94	93	(X)
	1972--	374	704.4	21	32	54	73	(NA)	94	90	(X)
	1970--	(NA)	547.2	17	28	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967--	356	508.1	17	27	48	68	(NA)	95	90	(X)
	1966--	(NA)	463.0	13	22	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963--	328	305.6	17	28	48	71	(NA)	92	91	(X)
	1958--	269	296.6	24	39	55	75	(NA)	90	92	(X)
	1954--	237	225.9	27	42	62	(NA)	(NA)	92	88	(X)
	1947--	206	116.0	22	36	59	(NA)	(NA)	82	83	(X)
3499	Fabricated metal products, n.e.c. <sup>12</sup> -----										
	1982--	2 910	4 406.0	13	18	28	39	73	92	87	(X)
	1977--	3 142	3 429.2	13	18	29	42	(NA)	89	83	(X)
	1972--	2 255	1 938.6	16	22	33	47	(NA)	89	74	(X)
35	MACHINERY, EXCEPT ELECTRICAL										
3511	Turbines and turbine generator sets -----										
	1982--	71	3 676.3	84	92	98	99+	2 602	94	80	(X)
	1977--	68	2 729.7	86	97	99	100	(NA)	92	82	(X)
	1972--	59	2 189.0	90	96	99	100	(NA)	92	90	(X)
	1970--	(NA)	1 791.0	77	88	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	20	1 043.2	76	82	100	(X)	(NA)	63	78	(X)
	1966--	(NA)	867.2	87	98	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	17	616.4	93	98	100	(X)	(NA)	85	82	(X)
3519	Internal combustion engines, n.e.c.-----										
	1982--	202	9 363.4	48	66	87	97	731	89	87	(X)
	1977--	187	7 696.5	49	70	88	98	(NA)	91	88	(X)
	1972--	145	3 326.1	50	70	92	99	(NA)	91	86	(X)
	1970--	(NA)	2 673.7	51	74	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	129	2 093.2	47	64	89	99	(NA)	89	83	(X)
	1966--	(NA)	2 052.5	52	69	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	120	1 473.6	49	65	89	99	(NA)	86	86	(X)
3523	Farm machinery and equipment <sup>12</sup> -----										
	1982--	1 787	10 743.0	53	62	69	77	1 468	94	95	(X)
	1977--	1 868	10 281.7	46	61	70	78	(NA)	92	95	(X)
	1972--	1 465	4 529.7	47	61	69	78	(NA)	90	94	(X)
3524	Lawn and garden equipment <sup>12</sup> -----										
	1982--	151	2 365.2	40	57	86	97	567	91	88	(X)
	1977--	137	1 575.3	30	51	82	96	(NA)	92	82	(X)
	1972--	100	1 059.1	34	53	78	95	(NA)	90	82	(X)
3531	Construction machinery -----										
	1982--	817	11 657.9	42	52	69	81	838	91	94	(X)
	1977--	807	12 628.7	47	59	75	86	(NA)	91	95	(X)
	1972--	644	6 091.0	43	54	72	86	(NA)	90	93	(X)
	1970--	(NA)	4 888.1	42	53	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	578	4 138.0	41	53	72	85	(NA)	88	92	(X)
	1966--	(NA)	3 767.8	45	57	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963--	561	2 696.0	42	53	70	84	(NA)	91	89	(X)
3532	Mining machinery -----										
	1982--	316	2 109.3	36	49	69	87	575	90	89	(X)
	1977--	293	1 996.7	37	50	70	88	(NA)	88	86	(X)
	1972--	220	771.4	41	55	72	89	(NA)	87	81	(X)
	1970--	(NA)	688.8	36	50	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	197	622.2	37	52	73	89	(NA)	78	82	(X)
	1966--	(NA)	630.4	34	52	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963--	198	417.6	35	53	74	91	(NA)	75	82	(X)
3533	Oil field machinery -----										
	1982--	848	11 195.1	27	44	64	81	315	92	96	(X)
	1977--	386	3 912.4	30	45	66	87	(NA)	88	95	(X)
	1972--	257	1 207.1	28	42	64	90	(NA)	82	92	(X)
	1970--	(NA)	1 063.7	23	37	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	309	799.8	21	36	60	82	(NA)	85	92	(X)
	1966--	(NA)	846.0	24	39	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	373	666.5	25	37	57	80	(NA)	90	91	(X)
3534	Elevators and moving stairways-----										
	1982--	148	1 120.7	47	65	82	93	706	96	95	(X)
	1977--	134	489.7	52	68	82	94	(NA)	96	93	(X)
	1972--	135	483.6	55	68	82	94	(NA)	97	96	(X)
	1970--	(NA)	467.8	61	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3
	95/1967--	130	319.7	55	67	81	94	(NA)	94	95	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
35	MACHINERY, EXCEPT ELECTRICAL—Con.										
3534	Elevators and moving stairways—Con.	1966... (NA)	352.6	63	74	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 126	318.6	62	73	85	95	(NA)	97	95	(X)
		1958... 135	189.4	62	71	82	93	(NA)	97	80	(X)
		1954... 127	161.0	66	74	83	(NA)	(NA)	87	89	(X)
		1947... 108	101.8	63	73	84	(NA)	(NA)	92	91	(X)
3535	Conveyors and conveying equipment -----	1982... 646	2 946.7	16	26	41	58	124	89	91	(X)
		1977... 572	1 897.9	19	30	46	64	(NA)	90	87	(X)
		1972... 457	969.8	22	32	50	69	(NA)	90	88	(X)
		1970... (NA)	878.2	24	34	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 416	736.0	29	39	56	74	(NA)	85	83	(X)
		1966... (NA)	725.4	29	39	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1963... 428	494.6	28	39	60	78	(NA)	82	83	(X)
3536	Hoists, cranes, and monorails -----	1982... 255	1 085.6	21	34	58	79	223	85	79	(X)
		1977... 231	836.0	16	30	57	80	(NA)	87	76	(X)
		961972... 176	527.3	30	46	71	89	(NA)	78	84	(X)
		1970... (NA)	477.2	39	55	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 139	444.4	44	61	80	93	(NA)	78	83	(X)
		1966... (NA)	437.3	44	62	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 120	220.0	36	53	79	95	(NA)	80	70	(X)
3537	Industrial trucks and tractors -----	1982... 463	1 922.2	36	51	66	80	419	94	91	(X)
		1977... 450	1 920.1	45	61	75	86	(NA)	94	95	(X)
		1972... 363	1 035.4	50	66	77	88	(NA)	96	91	(X)
		1970... (NA)	905.8	52	67	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967... 337	778.0	48	62	76	81	(NA)	93	86	(X)
		1966... (NA)	792.1	49	63	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 304	447.0	54	64	77	88	(NA)	90	81	(X)
		1958... 251	255.0	52	64	77	88	(NA)	92	84	(X)
		1954... 234	245.1	50	62	77	(NA)	(NA)	88	83	(X)
		1947... 191	162.2	57	69	81	(NA)	(NA)	84	84	(X)
3541	Machine tools, metal cutting types -----	1982... 865	4 411.5	30	44	65	80	351	91	93	(X)
		1977... 874	2 819.1	22	35	56	77	(NA)	87	92	(X)
		1972... 857	1 418.1	22	33	55	75	(NA)	86	90	(X)
		1970... (NA)	1 829.2	24	37	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 865	2 127.2	21	33	54	77	(NA)	86	90	(X)
		1966... (NA)	1 826.1	22	34	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 784	1 060.8	20	32	52	74	(NA)	81	88	(X)
		1958... 608	684.8	21	32	52	74	(NA)	82	90	(X)
		1954... 627	1 146.9	19	29	52	(NA)	(NA)	84	93	(X)
		1947... 312	493.9	20	30	50	(NA)	(NA)	77	86	(X)
3542	Machine tools, metal forming types -----	1982... 435	1 428.7	21	34	55	76	209	89	87	(X)
		1977... 411	1 130.6	18	32	55	77	(NA)	90	87	(X)
		1972... 375	693.6	18	33	54	75	(NA)	89	87	(X)
		1970... (NA)	760.2	23	39	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 344	714.0	23	38	63	82	(NA)	85	84	(X)
		1966... (NA)	727.7	24	38	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1963... 362	441.4	22	39	61	80	(NA)	86	79	(X)
3544	Special dies, tools, jigs, and fixtures-----	1982... 7 132	5 374.9	6	9	13	20	14	94	79	(X)
		1977... 7 033	3 901.3	8	10	14	21	(NA)	94	79	(X)
		1972... 6 513	2 426.7	7	10	14	21	(NA)	94	78	(X)
		1970... (NA)	2 478.9	7	9	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967... 6 532	2 202.3	4	7	12	19	(NA)	94	74	(X)
		1966... (NA)	2 217.9	5	8	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 5 850	1 388.8	6	9	14	21	(NA)	93	72	(X)
3545	Machine tool accessories -----	1982... 1 444	3 165.3	18	26	41	57	132	92	89	(X)
		1977... 1 271	2 384.5	20	31	45	61	(NA)	89	88	(X)
		1972... 1 113	1 249.0	19	30	47	63	(NA)	86	88	(X)
		1970... (NA)	1 206.3	21	32	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 1 073	1 309.9	20	32	47	64	(NA)	85	85	(X)
		1966... (NA)	1 230.3	20	32	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1963... 983	787.3	17	29	46	63	(NA)	83	84	(X)
3546	Power driven hand tools <sup>12</sup> -----	1982... 180	1 795.3	55	73	90	97	1 105	88	91	(X)
		1977... 99	1 623.2	50	70	95	99	(NA)	91	90	(X)
		1972... 71	97730.5	48	70	93	99	(NA)	82	92	(X)
3547	Rolling mill machinery <sup>12</sup> -----	1982... 58	502.9	58	78	94	99+	1 155	79	79	(X)
		1977... 58	507.4	62	77	93	99	(NA)	78	86	(X)
		1972... 40	327.8	69	88	96	100	(NA)	74	86	(X)
3549	Metalworking machinery, n.e.c. <sup>12</sup> -----	1982... 421	1 471.1	17	26	44	69	144	86	85	(X)
		1977... 522	916.8	15	24	43	66	(NA)	88	82	(X)
		1972... 384	427.8	15	27	50	72	(NA)	86	88	(X)
3551	Food products machinery -----	1982... 703	2 320.8	15	23	38	57	112	93	91	(X)
		1977... 685	1 786.8	14	24	40	60	(NA)	90	92	(X)
		1972... 636	1 000.1	18	27	42	62	(NA)	90	89	(X)
		1970... (NA)	916.2	21	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 611	830.2	22	34	49	66	(NA)	88	86	(X)
		1966... (NA)	827.3	21	32	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 649	640.5	22	33	47	65	(NA)	86	87	(X)
		1958... 657	429.5	16	27	43	61	(NA)	86	84	(X)
		1954... 650	404.3	16	29	46	(NA)	(NA)	84	86	(X)
		1947... 605	327.7	18	27	43	(NA)	(NA)	89	82	(X)
3552	Textile machinery -----	1982... 511	1 059.0	22	32	48	68	200	96	95	(X)
		1977... 600	951.0	22	35	51	69	(NA)	93	94	(X)
		1972... 535	822.8	31	46	61	75	(NA)	94	96	(X)
		1970... (NA)	793.0	33	49	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967... 524	711.7	31	48	65	78	(NA)	94	95	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
35	MACHINERY, EXCEPT ELECTRICAL—Con.									
3552	Textile machinery—Con.									
	1966..	(NA)	820.3	33	51	(NA)	(NA)	(NA)	(NA)	4
	1963..	529	542.7	35	52	67	80	(NA)	93	(X)
	1958..	507	363.2	34	49	64	79	(NA)	87	(X)
	1954..	517	336.8	32	46	63	(NA)	(NA)	89	(X)
	1947..	470	403.4	30	44	59	(NA)	(NA)	95	(X)
3553	Woodworking machinery -----									
	1982..	267	730.7	41	51	67	84	525	91	94
	1977..	291	585.6	35	46	62	80	(NA)	94	(X)
	1972..	229	<sup>9</sup> 7488.0	40	53	70	87	(NA)	90	(X)
	1970..	(NA)	385.6	36	51	(NA)	(NA)	(NA)	(NA)	4
	1967..	232	314.4	37	51	70	88	(NA)	83	(X)
	1966..	(NA)	382.5	32	45	(NA)	(NA)	(NA)	(NA)	3
	1963..	245	252.8	35	48	65	83	(NA)	80	(X)
	1958..	251	204.7	39	52	69	85	(NA)	79	(X)
	1954..	247	167.2	37	52	72	(NA)	(NA)	84	(X)
3554	Paper industries machinery -----									
	1982..	231	1 387.4	39	49	65	84	630	89	93
	1977..	193	826.9	40	52	69	88	(NA)	84	(X)
	1972..	203	447.8	32	46	65	85	(NA)	85	(X)
	1970..	(NA)	535.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967..	206	551.4	43	54	72	90	(NA)	92	(X)
	1966..	(NA)	502.8	37	51	(NA)	(NA)	(NA)	(NA)	2
	1963..	204	403.9	41	53	74	92	(NA)	88	(X)
	1958..	192	292.4	47	58	78	92	(NA)	93	(X)
	1954..	163	196.6	34	46	69	(NA)	(NA)	85	(X)
	1947..	144	151.1	28	42	66	(NA)	(NA)	85	(X)
3555	Printing trades machinery -----									
	1982..	507	2 281.1	40	50	65	79	569	97	91
	1977..	520	1 350.9	40	50	65	79	(NA)	97	(X)
	1972..	523	823.5	42	51	66	82	(NA)	97	(X)
	1970..	(NA)	750.6	48	58	(NA)	(NA)	(NA)	(NA)	1
	1967..	485	752.3	48	57	72	86	(NA)	98	(X)
	1966..	(NA)	649.1	46	58	(NA)	(NA)	(NA)	(NA)	2
	1963..	463	448.4	44	53	68	83	(NA)	95	(X)
	1958..	421	279.1	42	53	68	82	(NA)	97	(X)
	1954..	342	248.7	38	57	73	(NA)	(NA)	95	(X)
	1947..	300	199.4	31	48	70	(NA)	(NA)	95	(X)
	1935..	(NA)	(NA)	32	47	(NA)	(NA)	(NA)	(NA)	(X)
3559	Special industry machinery, n.e.c. -----									
	1982..	1 754	5 348.9	9	15	27	44	51	91	86
	1977..	1 548	3 627.0	13	20	34	52	(NA)	88	(X)
	1972..	1 310	2 603.9	20	27	42	59	(NA)	81	(X)
	1970..	(NA)	1 990.5	11	17	(NA)	(NA)	(NA)	(NA)	1
	1967..	1 085	1 833.0	13	21	35	54	(NA)	82	(X)
3561	Pumps and pumping equipment (1967 industry 3561, part) <sup>12</sup> -----									
	1982..	516	6 198.3	19	30	51	77	188	90	90
	1977..	515	3 773.7	17	29	52	78	(NA)	88	(X)
	1972..	492	1 917.3	17	27	49	75	(NA)	83	(X)
3562	Ball and roller bearings -----									
	1982..	109	3 149.5	47	65	85	98	724	96	99
	1977..	102	2 567.3	56	71	88	99	(NA)	96	(X)
	1972..	99	1 530.5	53	73	89	99	(NA)	94	(X)
	1970..	(NA)	1 314.6	54	74	(NA)	(NA)	(NA)	(NA)	(X)
	1967..	85	1 328.5	54	73	90	99	(NA)	97	(X)
	1966..	(NA)	1 398.9	56	74	(NA)	(NA)	(NA)	(NA)	(X)
	1963..	93	998.8	57	76	91	99	(NA)	97	(X)
	1958..	85	638.9	57	77	92	99	(NA)	97	(X)
	1954..	83	537.2	60	79	92	(NA)	(NA)	98	(X)
	1947..	78	365.6	62	79	93	(NA)	(NA)	94	(X)
3563	Air and gas compressors (1967 industry 3561, part) <sup>12</sup> -----									
	1982..	239	3 270.0	41	57	79	92	599	90	91
	1977..	148	2 075.6	45	64	86	96	(NA)	88	(X)
	1972..	66	858.1	47	72	94	99	(NA)	83	(X)
3564	Blowers and fans -----									
	1982..	450	2 173.5	14	24	43	69	130	88	92
	1977..	432	1 430.8	17	28	49	75	(NA)	89	(X)
	1972..	360	805.2	26	37	59	80	(NA)	79	(X)
	1970..	(NA)	670.6	24	37	(NA)	(NA)	(NA)	(NA)	3
	1967..	271	525.2	23	37	62	84	(NA)	85	(X)
	1966..	(NA)	444.3	25	39	(NA)	(NA)	(NA)	(NA)	7
	1963..	225	315.3	27	43	67	88	(NA)	83	(X)
	1958..	197	250.5	28	43	66	86	(NA)	83	(X)
	1954..	208	261.8	31	49	68	(NA)	(NA)	83	(X)
	1947..	187	140.7	39	54	72	(NA)	(NA)	75	(X)
3565	Industrial patterns -----									
	1982..	994	452.3	7	12	20	33	30	97	76
	1977..	1 001	320.6	9	14	23	36	(NA)	97	(X)
	1972..	1 017	198.0	7	13	23	36	(NA)	95	(X)
	1970..	(NA)	210.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	8
	1967..	1 156	201.8	9	14	24	39	(NA)	96	(X)
	1966..	(NA)	233.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9
	1963..	1 206	140.7	9	14	24	37	(NA)	96	(X)
3566	Speed changers, drives, and gears <sup>12</sup> -----									
	1982..	282	1 631.6	27	40	62	80	294	87	87
	1977..	307	1 222.3	29	42	64	81	(NA)	87	(X)
	1972..	330	632.7	27	41	62	80	(NA)	88	(X)
3567	Industrial furnaces and ovens -----									
	1982..	321	1 102.2	24	36	54	74	229	90	94
	1977..	311	746.3	26	39	58	76	(NA)	91	(X)
	1972..	253	443.2	30	43	66	83	(NA)	78	(X)
	1970..	(NA)	454.9	34	48	(NA)	(NA)	(NA)	(NA)	4
	1967..	246	495.7	36	50	68	85	(NA)	87	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				

35	MACHINERY, EXCEPT ELECTRICAL—Con.										
3567	Industrial furnaces and ovens—Con.										
	1966--	(NA)	401.0	35	48	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963--	229	279.1	28	42	62	84	(NA)	84	79	(X)
3568	Power transmission equipment, n.e.c. (1967 industry 3566, part) <sup>12</sup>										
	1982--	242	1 926.8	25	38	62	82	280	90	84	(X)
	1977--	184	1 626.0	26	44	69	89	(NA)	82	74	(X)
	1972--	125	876.4	36	58	75	92	(NA)	87	74	(X)
3569	General industrial machinery, n.e.c. <sup>98</sup>										
	1982--	1 390	4 554.7	9	15	27	43	51	88	86	(X)
	1977--	1 586	2 779.5	10	16	27	44	(NA)	88	86	(X)
	1972--	864	1 171.9	10	17	31	51	(NA)	85	81	(X)
	1970--	(NA)	1 032.6	13	23	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967--	725	901.2	10	19	36	56	(NA)	85	79	(X)
3573	Electronic computing equipment <sup>99</sup>										
	100 1982--	1 520	36 767.1	43	55	71	82	793	95	94	(X)
	1977--	808	12 921.8	44	55	71	85	(NA)	94	91	(X)
	1972--	518	6 471.2	51	63	78	90	(NA)	92	91	(X)
	1970--	(NA)	5 232.4	57	78	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	134	3 770.9	66	83	92	98	(NA)	96	97	(X)
3574	Calculating and accounting machines <sup>99</sup>										
	1982--	65	1 487.3	54	78	96	99+	944	74	77	(X)
	1977--	58	850.0	59	83	98	100	(NA)	84	77	(X)
	1972--	74	637.2	73	89	98	100	(NA)	97	86	(X)
	1970--	(NA)	887.9	83	91	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	132	707.8	83	90	95	99	(NA)	85	84	(X)
3576	Scales and balances, except laboratory										
	1982--	113	516.4	37	52	77	95	628	98	86	(X)
	1977--	92	348.1	50	66	85	98	(NA)	96	99	(X)
	1972--	86	200.4	50	68	88	99	(NA)	92	95	(X)
	1970--	(NA)	157.3	62	76	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	69	140.2	53	72	92	99	(NA)	93	96	(X)
	1966--	(NA)	130.7	50	69	(NA)	(NA)	(NA)	(NA)	(NA)	8
	1963--	81	98.5	50	69	88	99	(NA)	92	97	(X)
3579	Office machines, n.e.c., and typewriters <sup>101</sup>										
	1982--	203	4 256.7	50	65	84	96	842	81	87	(X)
	1977--	191	2 719.7	60	76	88	98	(NA)	76	91	(X)
	1972--	206	1 296.1	60	75	88	96	(NA)	79	87	(X)
3581	Automatic merchandising machines										
	1982--	88	479.4	51	72	93	99	851	93	98	(X)
	1977--	108	410.1	46	67	93	99	(NA)	94	93	(X)
	1972--	116	324.4	51	68	89	97	(NA)	94	92	(X)
	1970--	(NA)	247.3	57	73	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967--	143	248.0	60	74	87	96	(NA)	97	88	(X)
	1966--	(NA)	279.5	61	77	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	148	238.0	55	72	84	95	(NA)	81	90	(X)
3582	Commercial laundry equipment										
	1982--	86	321.0	36	53	79	97	533	96	87	(X)
	1977--	90	220.3	46	63	84	98	(NA)	90	81	(X)
	102 1972--	100	157.0	53	65	82	97	(NA)	91	70	(X)
	1970--	(NA)	165.3	57	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967--	109	183.1	51	63	83	97	(NA)	92	79	(X)
	1966--	(NA)	190.5	51	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963--	107	136.8	47	57	77	96	(NA)	91	89	(X)
	1958--	113	111.7	51	66	83	96	(NA)	94	95	(X)
	1954--	101	88.1	51	67	81	(NA)	(NA)	83	93	(X)
	1947--	119	4.4	59	69	81	(NA)	(NA)	94	94	(X)
3585	Refrigeration and heating equipment <sup>12 93</sup>										
	100 1982--	730	12 390.3	34	46	65	80	411	92	96	(X)
	1977--	731	9 638.1	41	51	67	82	(NA)	89	95	(X)
	1972--	655	7 083.5	40	53	70	85	(NA)	84	90	(X)
3586	Measuring and dispensing pumps										
	1982--	58	676.2	54	72	93	99+	983	86	93	(X)
	1977--	57	375.7	50	73	96	99+	(NA)	61	82	(X)
	1972--	54	232.3	51	75	94	100	(NA)	71	83	(X)
	1970--	(NA)	201.8	58	83	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967--	46	174.7	56	83	97	100	(NA)	71	80	(X)
	1966--	(NA)	206.9	48	77	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963--	42	159.5	46	80	97	100	(NA)	73	85	(X)
	1958--	32	110.5	52	85	99	100	(NA)	66	90	(X)
	1954--	(103)	104.4	(103)	(103)	(103)	(103)	(NA)	(103)	(X)	(X)
	1947--	51	125.1	49	76	97	(D)	(NA)	76	98	(X)
3589	Service industry machinery, n.e.c.										
	1982--	791	2 583.0	14	23	40	58	107	93	88	(X)
	1977--	959	1 771.8	11	21	39	59	(NA)	91	90	(X)
	1972--	669	913.8	12	22	39	62	(NA)	90	87	(X)
	1970--	(NA)	708.7	14	26	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967--	554	598.1	14	24	44	66	(NA)	89	88	(X)
	1966--	(NA)	570.8	15	26	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963--	496	378.3	14	26	46	67	(NA)	86	84	(X)
3592	Carburetors, pistons, rings, valves <sup>12</sup>										
	1982--	149	2 224.5	58	71	89	98	1 154	81	94	(X)
	1977--	131	1 400.6	52	71	92	98	(NA)	82	87	(X)
	1972--	98	744.3	53	71	92	98	(NA)	81	74	(X)
3599	Machinery, except electrical, n.e.c. <sup>12</sup>										
	1982--	21 913	12 272.2	3	5	7	11	5	96	94	(X)
	1977--	19 137	6 611.2	2	3	5	10	(NA)	96	94	(X)
	1972--	16 220	3 665.2	4	5	8	13	(NA)	93	94	(X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
36	ELECTRIC AND ELECTRONIC EQUIPMENT										
3612	Transformers -----	1982.. 240	2 916.0	52	70	84	94	931	94	96	(X)
		1977.. 229	2 209.1	56	70	85	95	(NA)	95	97	(X)
		1972.. 168	1 461.9	59	75	90	97	(NA)	96	97	(X)
		1970.. (NA)	1 392.5	59	76	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 150	1 188.4	65	78	92	97	(NA)	95	98	(X)
		1966.. (NA)	1 053.0	66	80	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 144	722.9	68	79	93	98	(NA)	92	94	(X)
		1958.. 153	639.1	71	84	94	98	(NA)	94	93	(X)
		1954.. 152	686.1	78	89	95	(NA)	(NA)	87	94	(X)
		1947.. 134	357.0	73	84	93	(NA)	(NA)	85	91	(X)
3613	Switchgear and switchboard apparatus -----	1982.. 514	5 192.2	45	57	72	84	603	91	93	(X)
		1977.. 542	3 562.6	51	65	78	88	(NA)	91	91	(X)
		1972.. 462	2 123.5	51	65	79	89	(NA)	91	89	(X)
		1970.. (NA)	1 890.3	52	66	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967.. 398	1 690.0	51	65	78	88	(NA)	89	90	(X)
		1966.. (NA)	1 549.0	52	67	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 338	1 093.7	51	65	79	89	(NA)	87	89	(X)
3621	Motors and generators -----	1982.. 349	6 060.1	36	50	67	84	476	94	81	(X)
		1977.. 343	4 462.7	42	55	72	86	(NA)	92	80	(X)
		1972.. 325	2 516.0	47	59	78	90	(NA)	91	81	(X)
		1970.. (NA)	2 475.2	50	62	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 320	2 402.3	48	60	74	87	(NA)	83	83	(X)
		1966.. (NA)	2 288.8	48	57	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 316	1 709.8	50	59	73	88	(NA)	81	84	(X)
		1958.. 317	1 359.7	47	56	72	88	(NA)	83	88	(X)
		1954.. 266	1 389.1	50	59	75	(NA)	(NA)	82	84	(X)
		1947.. 224	995.6	59	66	80	(NA)	(NA)	81	92	(X)
3622	Industrial controls -----	1982.. 852	4 329.1	37	50	63	73	467	93	87	(X)
		1977.. 676	2 511.4	42	54	68	79	(NA)	87	86	(X)
		1972.. 544	1 400.0	44	59	74	85	(NA)	79	84	(X)
		1970.. (NA)	1 170.8	47	62	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967.. 456	1 102.8	49	63	77	88	(NA)	83	81	(X)
		1966.. (NA)	1 049.0	50	65	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 421	648.7	56	69	91	90	(NA)	79	79	(X)
3623	Welding apparatus, electric -----	1982.. 164	1 353.2	45	62	77	91	798	89	94	(X)
		1977.. 160	1 189.6	47	65	80	94	(NA)	86	94	(X)
		1972.. 154	659.6	41	60	77	94	(NA)	84	92	(X)
		1970.. (NA)	505.9	45	64	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1967.. 133	493.3	38	53	78	93	(NA)	91	94	(X)
		1966.. (NA)	533.8	38	53	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1963.. 133	330.2	41	54	79	94	(NA)	93	89	(X)
		1958.. 123	234.7	39	52	78	95	(NA)	93	92	(X)
		1954.. 111	168.8	39	52	76	(NA)	(NA)	90	92	(X)
		1947.. 103	103.7	46	58	79	(NA)	(NA)	93	89	(X)
3624	Carbon and graphite products -----	1982.. 70	971.4	74	82	94	99	1 931	94	93	(X)
		1977.. 58	735.2	80	88	97	99+	(NA)	94	93	(X)
		1972.. 58	397.4	80	91	98	99+	(NA)	95	98	(X)
		1970.. (NA)	369.6	87	94	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 49	296.4	86	93	98	100	(NA)	96	96	(X)
		1966.. (NA)	283.2	88	93	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963.. 40	226.9	83	92	98	100	(NA)	93	96	(X)
		1958.. 34	154.5	87	92	99	100	(NA)	97	95	(X)
		1954.. 43	111.0	86	93	98	100	(NA)	98	94	(X)
		1947.. 36	68.7	87	93	99	100	(NA)	95	95	(X)
3629	Electrical industrial apparatus, n.e.c. -----	1982.. 309	1 111.3	26	42	65	85	320	87	92	(X)
		1977.. 213	692.4	28	43	66	87	(NA)	87	81	(X)
		1972.. 245	449.4	31	47	65	83	(NA)	85	80	(X)
		1970.. (NA)	409.9	35	49	(NA)	(NA)	(NA)	(NA)	(NA)	4
		1967.. 212	328.8	33	45	61	83	(NA)	84	67	(X)
		1966.. (NA)	369.4	33	45	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1963.. 226	238.3	38	51	67	84	(NA)	80	72	(X)
3631	Household cooking equipment -----	1982.. 71	2 414.9	52	73	93	99+	914	86	84	(X)
		1977.. 84	1 707.2	51	71	90	99+	(NA)	92	80	(X)
		1972.. 74	939.8	60	73	90	99+	(NA)	91	74	(X)
		1970.. (NA)	656.5	61	76	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 66	551.9	56	72	90	99+	(NA)	92	77	(X)
		1966.. (NA)	548.5	54	71	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 77	473.5	51	68	88	99+	(NA)	87	72	(X)
3632	Household refrigerators and freezers -----	1982.. 39	2 470.7	94	98	99+	100	2 745	85	94	(X)
		1977.. 33	2 576.6	82	98	99+	100	(NA)	77	98	(X)
		1972.. 30	1 719.7	85	98	99+	100	(NA)	75-80	80-85	(X)
		1970.. (NA)	2 022.1	82	99	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 31	1 785.4	73	93	99+	100	(NA)	59	99	(X)
		1966.. (NA)	1 674.9	72	93	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963.. 31	1 306.5	74	91	99+	100	(NA)	66	99	(X)
3633	Household laundry equipment -----	1982.. 15	2 122.2	91	(D)	100	(X)	(D)	85	99	(X)
		1977.. 21	1 792.8	89	(D)	(D)	100	(NA)	87	90	(X)
		1972.. 20	1 356.5	83	98	100	(X)	(NA)	88	91	(X)
		1970.. (NA)	1 081.0	83	97	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967.. 25	982.5	78	95	99+	100	(NA)	87	90	(X)

See footnotes at end of table.



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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.									
3633	Household laundry equipment—Con.									
	1966..	(NA)	946.9	79	95	(NA)	(NA)	(NA)	(NA)	2
	1963..	31	760.2	78	95	99+	100	(NA)	89	87
	1958..	34	722.2	71	90	99	100	(NA)	91	91
	1954..	48	527.5	68	85	99	100	(NA)	93	81
	1947..	59	442.3	40	65	91	(NA)	(NA)	90	91
	1935..	(NA)	(NA)	56	79	(NA)	(NA)	(NA)	(NA)	(X)
3634	Electric housewares and fans -----									
	1982..	217	3 128.4	38	53	79	96	547	84	94
	1977..	239	2 531.2	46	59	78	94	(NA)	87	90
	1972..	247	1 615.0	43	60	76	91	(NA)	88	91
	1970..	(NA)	1 275.5	45	59	(NA)	(NA)	(NA)	(NA)	1
	1967..	248	1 112.0	52	63	80	94	(NA)	90	86
	1966..	(NA)	1 127.8	50	61	(NA)	(NA)	(NA)	(NA)	2
	1963..	286	850.3	41	59	78	92	(NA)	87	81
3635	Household vacuum cleaners-----									
	1982..	29	775.7	80	96	99+	100	1 951	95	80
	1977..	32	639.9	83	95	99+	100	(NA)	(D)	81
	1972..	34	467.7	75	91	99	100	(NA)	80	85
	1970..	(NA)	346.1	79	97	(NA)	(NA)	(NA)	(NA)	1
	1967..	34	293.2	76	94	99	100	(NA)	75	84
	1966..	(NA)	252.6	78	98	(NA)	(NA)	(NA)	(NA)	2
	1963..	34	175.4	81	96	99	100	(NA)	87	80
3636	Sewing machines -----									
	1982..	86	299.7	72	82	93	99	1 951	(D)	(D)
	1977..	86	304.9	83	91	96	99+	(NA)	(D)	(X)
	1972..	72	159.6	84	92	97	99+	(NA)	95-100	93
	1970..	(NA)	135.9	80	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967..	83	123.6	81	92	97	99+	(NA)	95-99	96
	1966..	(NA)	120.8	(D)	(S)	(NA)	(NA)	(NA)	(NA)	4
	1963..	83	117.2	(D)	93	97	99+	(NA)	95-99	96
	1958..	80	95.4	(D)	93	97	99	(NA)	97	94
	1954..	78	112.0	81	91	96	(NA)	(NA)	91	94
	1947..	69	97.0	77	87	97	(NA)	(NA)	95	94
	1935..	(NA)	(NA)	78	90	(NA)	(NA)	(NA)	(NA)	(X)
3639	Household appliances, n.e.c. -----									
	1982..	70	1 432.0	51	82	96	99+	928	90	82
	1977..	65	1 184.0	52	83	98	99+	(NA)	93	79
	1972..	70	681.9	57	76	94	99+	(NA)	93	96
	1970..	(NA)	535.8	46	67	(NA)	(NA)	(NA)	(NA)	1
	1967..	71	479.9	44	65	92	99+	(NA)	87	79
	1966..	(NA)	448.9	45	67	(NA)	(NA)	(NA)	(NA)	2
	1963..	102	435.5	41	61	86	98	(NA)	79	79
3641	Electric lamps -----									
	1982..	113	2 072.6	91	96	98	99	(D)	98	98
	1977..	128	1 651.4	90	95	98	99	(NA)	97	98
	1972..	103	1 095.7	90	94	98	99+	(NA)	95	96
	1970..	(NA)	891.5	92	97	(NA)	(NA)	(NA)	(NA)	1
	1967..	72	781.8	91	95	99	99+	(NA)	94	95
	1966..	(NA)	742.0	93	97	(NA)	(NA)	(NA)	(NA)	2
	1963..	54	574.5	92	96	99	(D)	(NA)	95	96
	1958..	35	409.5	92	97	99+	100	(NA)	94	98
	1954..	35	326.3	93	97	99+	100	(NA)	94	99
	1947..	35	203.2	92	96	99+	100	(NA)	94	100
3643	Current-carrying wiring devices -----									
	1982..	357	2 510.3	28	39	56	77	287	85	76
	1977..	361	1 795.2	26	38	59	82	(NA)	84	79
	1972..	366	1 216.6	30	46	65	83	(NA)	83	81
	1970..	(NA)	1 008.9	32	47	(NA)	(NA)	(NA)	(NA)	3
	1967..	351	837.0	32	48	67	83	(NA)	78	78
	1966..	(NA)	811.3	32	48	(NA)	(NA)	(NA)	(NA)	3
	1963..	431	616.0	28	44	64	82	(NA)	80	83
3644	Noncurrent-carrying wiring devices -----									
	1982..	187	2 399.6	30	44	68	91	362	79	88
	1977..	174	1 421.8	25	39	65	89	(NA)	82	83
	1972..	149	886.4	24	41	67	91	(NA)	81	78
	1970..	(NA)	789.4	24	40	(NA)	(NA)	(NA)	(NA)	1
	1967..	158	637.9	26	42	68	93	(NA)	74	82
	1966..	(NA)	673.9	22	36	(NA)	(NA)	(NA)	(NA)	3
	1963..	168	479.0	22	39	66	91	(NA)	77	80
3645	Residential lighting fixtures <sup>12</sup> -----									
	1982..	613	1 351.8	19	27	41	58	152	93	95
	1977..	675	986.6	25	33	45	61	(NA)	95	92
	1972..	665	767.2	28	35	46	59	(NA)	97	93
3646	Commercial lighting fixtures <sup>12</sup> -----									
	1982..	219	1 671.9	35	50	70	85	501	91	87
	1977..	192	922.7	30	46	68	86	(NA)	90	86
	1972..	206	718.7	25	40	64	85	(NA)	90	91
3647	Vehicular lighting equipment <sup>12</sup> -----									
	1982..	78	1 013.6	71	80	92	99	2 288	65	96
	1977..	70	908.5	(D)	86	95	99+	(NA)	68	94
	1972..	46	499.8	78	89	97	100	(NA)	68	94
3648	Lighting equipment, n.e.c. <sup>12</sup> -----									
	1982..	222	1 028.0	31	44	63	82	384	87	74
	1977..	211	671.0	25	39	60	82	(NA)	85	81
	1972..	172	466.5	29	46	73	90	(NA)	86	79
3651	Radio and TV receiving sets -----									
	1982..	432	6 063.9	49	70	86	94	751	90	95
	1977..	546	5 731.6	51	65	81	92	(NA)	94	98
	1972..	343	4 440.1	49	71	86	96	(NA)	95	99
	1970..	(NA)	3 594.8	48	67	(NA)	(NA)	(NA)	(NA)	1
	1967..	303	3 846.3	49	69	85	95	(NA)	94	99
	1966..	(NA)	4 117.4	48	68	(NA)	(NA)	(NA)	(NA)	2
	1963..	322	2 254.9	41	62	82	94	(NA)	91	96

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.										
3652	Phonograph records and prerecorded tape.....	1982... 548	1 768.9	61	71	81	87	1 153	99	90	(X)
		1977... 679	1 181.7	48	62	75	85	(NA)	99	99	(X)
		1972... 537	567.7	48	61	76	85	(NA)	98	99	(X)
		1970... (NA)	437.5	62	73	(NA)	(NA)	(NA)	(NA)	(NA)	6
		1967... 306	276.4	58	67	81	92	(NA)	99	96	(X)
		1966... (NA)	218.4	71	79	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 128	180.2	69	75	85	94	(NA)	99	97	(X)
		1958... 85	138.6	76	83	90	98	(NA)	97	98	(X)
		1954... 135	84.7	70	80	88	(NA)	(NA)	94	97	(X)
		1947... 96	110.2	79	87	94	(NA)	(NA)	96	99	(X)
3661	Telephone and telegraph apparatus..... <sup>100</sup>	1982... 259	13 394.4	76	83	92	97	(D)	95	98	(X)
		1977... 208	7 858.3	(D)	89	94	98	(NA)	94	97	(X)
		1972... 157	4 524.7	(D)	(D)	98	99+	(NA)	91	99	(X)
		1970... (NA)	4 059.7	94	99	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 82	2 591.2	92	96	99	99+	(NA)	88	96	(X)
		1966... (NA)	2 467.0	94	97	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 65	1 736.4	92	96	99	99+	(NA)	95	95	(X)
		1958... 44	1 253.0	92	97	99+	100	(NA)	(NA)	(NA)	(X)
		1954... 56	797.1	90	95	(NA)	(NA)	(NA)	93	96	(X)
		1947... 50	689.2	(NA)	(NA)	(NA)	(NA)	(NA)	94	99	(X)
3662	Radio and TV communication equipment.....	1982... 2 083	33 031.6	22	35	57	73	224	93	91	(X)
		1977... 1 873	14 886.0	20	33	57	73	(NA)	92	92	(X)
		1972... 1 524	9 140.2	19	33	58	77	(NA)	91	91	(X)
		1970... (NA)	9 330.8	19	33	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 1 111	8 555.8	22	37	61	81	(NA)	89	92	(X)
		1966... (NA)	7 562.6	24	39	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 1 001	7 145.6	29	45	69	84	(NA)	88	91	(X)
3671	Electron tubes, all types (1972 industries 3671, 3672, and 3673) <sup>104</sup> .....	1982... 86	2 302.3	55	78	97	99+	1 029	78	94	(X)
		1977... 125	1 581.7	58	78	95	99	(NA)	78	93	(X)
3674	Semiconductors and related devices.....	1982... 685	12 429.9	40	57	77	90	597	94	96	(X)
		1977... 499	5 327.1	42	62	79	90	(NA)	93	94	(X)
		1972... 289	2 704.8	57	70	82	94	(NA)	89	92	(X)
		1970... (NA)	1 473.2	49	65	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 141	1 141.0	47	65	85	98	(NA)	92	87	(X)
		1966... (NA)	1 123.7	51	70	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 86	687.8	46	65	90	99	(NA)	88	92	(X)
3675	Electronic capacitors <sup>12</sup> .....	1982... 93	1 188.9	50	68	87	98	874	94	90	(X)
		1977... 86	742.3	47	62	86	98	(NA)	92	91	(X)
		1972... 79	445.8	42	61	85	97	(NA)	90	87	(X)
3676	Electronic resistors <sup>12</sup> .....	1982... 77	765.8	43	68	89	98	676	89	88	(X)
		1977... 77	578.3	38	63	86	98	(NA)	87	81	(X)
		1972... 67	372.2	43	65	86	99	(NA)	90	74	(X)
3677	Electronic coils and transformers <sup>12</sup> .....	1982... 353	863.3	12	20	38	58	95	91	84	(X)
		1977... 276	506.4	20	30	46	67	(NA)	91	75	(X)
		1972... 215	354.1	14	24	45	71	(NA)	87	79	(X)
3678	Electronic connectors <sup>12</sup> .....	1982... 148	2 565.0	40	55	79	94	637	87	91	(X)
		1977... 106	1 104.6	45	65	82	96	(NA)	78	86	(X)
		1972... 75	483.3	55	71	87	98	(NA)	87	81	(X)
3679	Electronic components, n.e.c. <sup>12</sup> .....	1982... 3 575	14 401.6	31	37	47	57	449	84	78	(X)
		1977... 3 005	5 549.2	29	36	45	56	(NA)	79	74	(X)
		1972... 1 745	3 059.9	36	41	51	63	(NA)	80	72	(X)
3691	Storage batteries.....	1982... 129	2 431.3	56	79	92	98	989	97	98	(X)
		1977... 134	1 982.5	57	84	93	98	(NA)	97	99	(X)
		1972... 138	968.6	57	85	93	98	(NA)	98	99	(X)
		1970... (NA)	783.0	56	83	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 154	577.5	61	83	93	98	(NA)	98	97	(X)
		1966... (NA)	615.7	60	80	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1963... 169	516.5	59	78	92	97	(NA)	98	99	(X)
		1958... 206	366.6	64	81	91	96	(NA)	99	100	(X)
		1954... 244	341.4	64	80	90	(NA)	(NA)	100	100	(X)
		1947... 205	297.7	62	78	87	(NA)	(NA)	90	99	(X)
3692	Primary batteries, dry and wet.....	1982... 36	1 101.8	89	95	99+	100	(D)	94	95	(X)
		1977... 41	666.1	87	94	99	100	(NA)	96	97	(X)
		1972... 30	348.1	92	97	99+	100	(NA)	95	98	(X)
		1970... (NA)	329.5	85	96	(NA)	(NA)	(NA)	(NA)	(NA)	1
		1967... 32	307.6	85	95	99+	100	(NA)	97	86	(X)
		1966... (NA)	277.0	88	97	(NA)	(NA)	(NA)	(NA)	(NA)	2
		1963... 26	195.3	89	98	99+	100	(NA)	96	91	(X)
		1958... 24	134.9	84	95	99+	100	(NA)	99	98	(X)
		1954... 20	121.8	78	93	100	(X)	(NA)	98	98	(X)
		1947... 23	85.0	76	95	99+	100	(NA)	90-100	98-100	(X)
3693	X-ray, electromedical, and electrotherapeutic apparatus.....	1982... 217	4 270.0	31	51	74	91	435	96	94	(X)
		1977... 212	1 884.7	32	51	73	90	(NA)	98	92	(X)
		1972... 95	443.7	54	75	90	99	(NA)	95	92	(X)
		1970... (NA)	256.3	59	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	3
		1967... 78	233.2	62	77	92	99+	(NA)	93	86	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.									
3693	X-ray, electromedical, and electrotherapeutic apparatus—Con.									
	1966...	(NA)	240.4	67	85	(NA)	(NA)	(NA)	(NA)	5
	1963...	56	143.7	67	79	93	99+	(NA)	83	(X)
	1958...	126	77.2	63	74	87	96	(NA)	85	(X)
	1954...	129	79.9	51	69	87	(NA)	(NA)	81	(X)
	1947...	114	59.5	58	75	90	(NA)	(NA)	94	(X)
3694	Engine electrical equipment -----									
	1982...	393	3 464.3	52	67	82	91	1 122	85	88
	1977...	372	3 647.2	62	75	87	94	(NA)	81	89
	1972...	266	2 035.0	65	78	89	96	(NA)	79	87
	1970...	(NA)	1 569.9	66	75	(NA)	(NA)	(NA)	(NA)	2
	1967...	239	1 364.7	68	77	89	96	(NA)	81	85
	1966...	(NA)	1 342.5	72	81	(NA)	(NA)	(NA)	(NA)	(X)
	1963...	163	900.7	69	79	88	97	(NA)	93	81
	1958...	147	565.7	66	78	91	95	(NA)	81	85
	1954...	154	587.1	62	83	90	(NA)	(NA)	85	87
	1947...	100	357.8	87	81	93	(NA)	(NA)	89	91
3699	Electrical equipment and supplies, n.e.c. -----									
	1982...	714	1 276.2	27	34	47	63	271	92	84
	1977...	612	749.0	27	33	48	65	(NA)	94	77
	1972...	968	501.8	21	30	45	62	(NA)	91	52
	1970...	(NA)	416.3	26	37	(NA)	(NA)	(NA)	(NA)	9
	1967...	528	290.8	23	34	52	73	(NA)	93	85
	1966...	(NA)	319.3	30	40	(NA)	(NA)	(NA)	(NA)	4
	1963...	245	190.0	38	48	64	81	(NA)	90	84
37	TRANSPORTATION EQUIPMENT									
3711	Motor vehicles and car bodies -----									
	1982...	284	70 739.7	92	97	99	99+	(D)	95	99
	1977...	254	76 517.8	93	99	99+	99+	(NA)	95	99
	1972...	165	42 905.6	93	99	99+	99+	(NA)	96	100
	1970...	(NA)	27 750.7	91	97	(NA)	(NA)	(NA)	(NA)	1
	1967...	107	27 296.0	92	98	99+	99+	(NA)	96	99
3713	Truck and bus bodies (1972 industry 3713, part) <sup>105</sup> -----									
	1982...	636	2 463.6	27	34	49	66	422	93	94
	1977...	770	2 003.3	33	40	52	66	(NA)	94	93
	1972...	729	1 564.4	26	34	48	64	(NA)	90	91
	1970...	(NA)	935.5	22	31	(NA)	(NA)	(NA)	(NA)	2
	1967...	620	706.1	21	30	47	65	(NA)	85	92
	1966...	(NA)	718.6	27	26	(NA)	(NA)	(NA)	(NA)	5
	1963...	594	476.7	22	32	50	66	(NA)	88	86
	1958...	548	292.4	21	31	49	68	(NA)	87	87
	1954...	555	256.9	(NA)	(NA)	(NA)	(NA)	(NA)	86	87
	1947...	599	242.3	22	31	48	(NA)	(NA)	79	90
3714	Motor vehicle parts and accessories -----									
	1982...	2 000	36 293.1	61	69	77	84	1 817	93	86
	1977...	2 194	35 750.8	62	70	79	86	(NA)	94	87
	1972...	1 748	18 333.5	61	69	78	86	(NA)	94	86
	1970...	(NA)	13 073.2	58	66	(NA)	(NA)	(NA)	(NA)	1
	1967...	1 424	11 623.8	60	68	78	87	(NA)	96	99
3715	Truck trailers -----									
	1982...	286	1 820.6	36	50	67	84	487	95	95
	1977...	316	1 910.1	43	56	71	86	(NA)	94	96
	1972...	215	1 117.9	45	60	77	91	(NA)	96	94
	1970...	(NA)	777.5	49	63	(NA)	(NA)	(NA)	(NA)	2
	1967...	147	713.9	48	64	82	95	(NA)	94	91
	1966...	(NA)	795.6	53	66	(NA)	(NA)	(NA)	(NA)	2
	1963...	175	515.7	59	69	81	93	(NA)	92	93
	1958...	155	324.6	52	63	77	93	(NA)	84	83
	1954...	115	305.5	57	68	84	(NA)	(NA)	82	93
	1947...	107	155.7	56	67	83	(NA)	(NA)	81	87
3716	Motor homes produced on purchased chassis (1972 industry 3713, part) <sup>105</sup> -----									
	1982...	79	952.7	54	65	86	98	1 188	97	88
	1977...	80	1 564.5	43	58	75	94	(NA)	92	94
3721	Aircraft -----									
	1982...	139	106 28 024.3	64	81	98	99+	1 358	87	97
	1977...	151	106 14 834.2	59	81	99	99+	(NA)	83	98
	1972...	141	106 8 779.3	66	86	99	99+	(NA)	86	96
	1970...	(NA)	107 10 996.2	65	87	(NA)	(NA)	(NA)	(NA)	1
	1967...	91	107 5 447.6	69	89	99	99+	(NA)	83	97
	1966...	(NA)	107 4 674.6	67	88	(NA)	(NA)	(NA)	(NA)	2
	1963...	82	107 3 542.7	59	83	99	99+	(NA)	69	96
	1958...	113	107 3 375.9	59	83	99	99+	(NA)	81	99
	1954...	(108)	107 3 348.9	(108)	(108)	(108)	(108)	(NA)	(108)	(108)
	1947...	(108)	107 606.0	(108)	(108)	(108)	(108)	(NA)	(108)	(108)
3724	Aircraft engines and engine parts <sup>12</sup> -----									
	1982...	281	13 809.3	72	83	91	96	1 778	85	96
	1977...	226	6 272.3	74	86	93	97	(NA)	81	95
	1972...	189	3 640.2	77	87	94	97	(NA)	87	94
3728	Aircraft equipment, n.e.c. <sup>12</sup> -----									
	1982...	912	10 193.1	38	54	73	85	598	71	65
	1977...	681	4 760.6	45	56	73	85	(NA)	72	57
	1972...	649	3 031.9	33	51	69	84	(NA)	77	66
3731	Ship building and repairing -----									
	1982...	617	107 10 967.2	35	49	69	84	418	99	99
	1977...	542	107 6 495.1	43	58	76	88	(NA)	97	99
	1972...	415	107 3 281.0	47	63	81	91	(NA)	98	98
	1970...	(NA)	107 2 534.1	46	65	(NA)	(NA)	(NA)	(NA)	1
	1967...	389	107 2 518.2	42	59	77	90	(NA)	95	98

See footnotes at end of table.

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>5</sup>	Primary product speciali- zation ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
37	TRANSPORTATION EQUIPMENT—Con.										
3731	Ship building and repairing—Con.										
	1966...	(NA)	<sup>1072</sup> 338.9	42	61	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963...	305	<sup>1071</sup> 679.8	48	63	81	92	(NA)	92	99	(X)
	1958...	293	<sup>1071</sup> 626.3	48	66	80	91	(NA)	93	99	(X)
	1954...	328	<sup>1071</sup> 077.9	43	58	74	(NA)	(NA)	92	99	(X)
	1947...	272	<sup>1078</sup> 002.6	43	55	73	(NA)	(NA)	94	98	(X)
3732	Boat building and repairing -----										
	1982...	1 834	2 359.2	14	22	35	52	91	98	96	(X)
	1977...	2 148	1 822.6	11	19	32	49	(NA)	98	96	(X)
	1972...	1 725	1 048.2	14	23	38	54	(NA)	97	96	(X)
	1970...	(NA)	673.5	15	24	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967...	1 565	571.4	19	27	41	57	(NA)	96	91	(X)
	1966...	(NA)	485.1	20	29	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963...	1 596	360.2	21	29	42	56	(NA)	97	95	(X)
	1958...	1 622	310.2	18	25	37	52	(NA)	94	95	(X)
	1954...	1 146	154.4	21	28	39	(NA)	(NA)	93	85	(X)
	1947...	798	114.4	31	41	53	(NA)	(NA)	83	88	(X)
3743	Railroad equipment <sup>12</sup> -----										
	1982...	158	3 456.6	58	71	88	97	1 221	85	96	(X)
	1977...	145	4 278.3	51	65	86	97	(NA)	91	94	(X)
	1972...	128	2 446.2	56	70	90	98	(NA)	92	95	(X)
3751	Motorcycles, bicycles, and parts (1967 industry 3751, part) <sup>9</sup> -----										
	1982...	269	1 341.1	59	79	88	94	1 077	85	96	(X)
	1977...	343	1 007.6	66	81	89	94	(NA)	84	97	(X)
	1972...	219	659.5	65	78	92	97	(NA)	81	95	(X)
	1970...	(NA)	404.8	57	72	(NA)	(NA)	(NA)	(NA)	(NA)	7
	1967...	87	299.6	57	76	95	99+	(NA)	89	96	(X)
	1966...	(NA)	261.1	57	78	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963...	85	192.9	56	77	94	99+	(NA)	83	93	(X)
	1958...	49	118.3	58	81	97	99+	(NA)	84	93	(X)
	1954...	44	95.6	50	77	97	100	(NA)	86	92	(X)
	1947...	75	163.7	42	68	92	(NA)	(NA)	87	89	(X)
	1935...	(NA)	(NA)	60	90	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3761	Guided missiles and space vehicles <sup>94</sup> -----										
	1982...	16	10 218.6	71	96	100	(X)	1 578	83	86	(X)
	1977...	20	5 314.4	64	94	100	(X)	(NA)	87	91	(X)
	1972...	23	4 123.7	62	88	(D)	100	(NA)	81	95	(X)
3764	Space propulsion units and parts <sup>94</sup> -----										
	1982...	20	2 221.2	68	93	100	(X)	1 402	89	89	(X)
	1977...	18	945.5	69	93	100	(X)	(NA)	92	88	(X)
	1972...	22	716.3	59	92	(D)	100	(NA)	91	87	(X)
3769	Space vehicle equipment, n.e.c. <sup>94</sup> -----										
	1982...	45	1 958.3	(D)	(D)	99	100	(D)	62	46	(X)
	1977...	41	339.4	76	86	97	100	(NA)	85	(D)	(X)
	1972...	45	788.2	70	85	97	100	(NA)	79	68	(X)
3792	Travel trailers and campers <sup>12</sup> -----										
	1982...	446	1 281.6	36	48	63	79	423	88	97	(X)
	1977...	775	1 582.4	31	44	58	72	(NA)	88	90	(X)
	1972...	943	1 342.4	21	29	43	59	(NA)	92	94	(X)
3795	Tanks and tank components <sup>94</sup> -----										
	1982...	38	2 351.0	85	95	99	100	2 515	(D)	79	(X)
	1977...	20	934.2	87	97	100	(X)	(NA)	92	82	(X)
	1972...	18	272.2	95	99	100	(X)	(NA)	95	77	(X)
3799	Transportation equipment, n.e.c. <sup>109</sup> -----										
	1982...	408	895.2	24	33	52	72	223	93	82	(X)
	1977...	408	620.9	35	46	63	79	(NA)	94	79	(X)
	1972...	444	654.6	28	38	53	73	(NA)	93	74	(X)
38	INSTRUMENTS AND RELATED PRODUCTS										
3811	Engineering and scientific instruments -----										
	1982...	738	3 046.2	31	43	59	75	353	82	78	(X)
	1977...	740	1 926.7	25	37	56	72	(NA)	85	79	(X)
	1972...	703	1 042.0	22	33	50	68	(NA)	86	72	(X)
	1970...	(NA)	1 150.9	26	38	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1967...	642	1 000.8	28	38	56	71	(NA)	88	73	(X)
	1966...	(NA)	748.7	29	41	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963...	571	553.9	29	40	58	75	(NA)	84	56	(X)
3822	Environmental controls -----										
	1982...	221	1 549.1	51	71	86	95	1 000	92	90	(X)
	1977...	182	1 358.7	59	81	92	97	(NA)	80	92	(X)
	1972...	117	728.1	57	76	93	99	(NA)	86	90	(X)
	1970...	(NA)	642.2	56	81	(NA)	(NA)	(NA)	(NA)	(NA)	1
	1967...	88	618.0	56	75	96	99+	(NA)	81	81	(X)
	1966...	(NA)	628.5	59	77	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963...	89	527.4	55	75	96	99+	(NA)	82	95	(X)
3823	Process control instruments <sup>12 110</sup> -----										
	1982...	586	4 037.8	32	44	59	74	353	91	87	(X)
	1977...	383	2 022.0	32	46	64	81	(NA)	90	80	(X)
	1972...	175	906.9	35	53	75	89	(NA)	83	83	(X)
3824	Fluid meters and counting devices <sup>12 110</sup> -----										
	1982...	133	728.3	38	59	81	95	568	94	84	(X)
	1977...	100	650.4	43	67	87	98	(NA)	80	80	(X)
	1972...	51	296.2	57	77	95	(D)	(NA)	90	79	(X)
3825	Instruments to measure electricity <sup>9</sup> -----										
	1982...	676	6 094.4	42	50	65	80	685	94	91	(X)
	1977...	622	2 761.0	33	43	61	78	(NA)	90	89	(X)
	1972...	606	1 493.5	38	49	64	79	(NA)	82	88	(X)
	1970...	(NA)	1 309.9	38	48	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967...	502	1 184.0	35	45	61	77	(NA)	84	79	(X)
	1966...	(NA)	1 020.5	36	48	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963...	536	749.2	34	47	65	81	(NA)	84	78	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>				Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)	
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
38	INSTRUMENTS AND RELATED PRODUCTS—Con.										
3829	Measuring and controlling devices, n.e.c. <sup>12 110</sup> -----	1982-- 693 1977-- 649 1972-- 579	2 223.1 1 118.1 577.7	24 25 23	33 35 37	48 52 56	67 69 77	271 (NA) (NA)	89 89 85	83 83 77	(X) (X) (X)
3832	Optical instruments and lenses <sup>111</sup> -----	1982-- 574 1977-- 510 1972-- 467 1970-- (NA) 1967-- 287  1966-- (NA) 1963-- 272 1958-- 222	3 757.3 1 330.4 531.5 431.5 406.9  332.4 196.0 89.0	29 30 42 54 49	40 43 53 64 59	59 63 66 (NA) 74	77 81 79 (NA) 88	338 (NA) (NA) (NA) (NA)	88 84 92 (NA) 87	86 82 79 (NA) 74	(X) (X) (X) 2 (X)
3841	Surgical and medical instruments-----	1982-- 766 1977-- 575 1972-- 448 1970-- (NA) 1967-- 298 1966-- (NA) 1963-- 256	4 084.5 1 833.1 961.8 630.2 475.4 360.1 284.0	32 32 32 43 38 40 47	50 48 45 55 54 51 58	66 67 64 (NA) 72 (NA) 72	81 82 81 (NA) 88 (NA) 86	376 (NA) (NA) (NA) (NA) (NA) (NA)	90 88 90 (NA) 91 (NA) 88	81 80 82 (NA) 63 (NA) 74	(X) (X) (X) 2 (X) 6 (X)
3842	Surgical appliances and supplies-----	1982-- 1 224 1977-- 1 017 1972-- 780 1970-- (NA) 1967-- 755 1966-- (NA) 1963-- 525	5 667.1 2 597.3 1 453.5 1 209.6 837.9 768.9 594.8	30 38 41 43 44 45 49	41 49 54 56 53 55 58	57 62 67 (NA) 66 (NA) 71	72 77 81 (NA) 80 (NA) 84	352 (NA) (NA) (NA) (NA) (NA) (NA)	86 87 79 (NA) 80 (NA) 80	89 85 90 (NA) 86 (NA) 90	(X) (X) (X) 2 (X) 6 (X)
3843	Dental equipment and supplies-----	1982-- 438 1977-- 507 1972-- 385 1970-- (NA) 1967-- 314  1966-- (NA) 1963-- 267 1958-- 240 1954-- 193 1947-- 209 1935-- (NA)	1 111.7 786.7 409.2 274.2 220.5  205.6 147.8 108.7 79.2 71.1 (NA)	38 33 35 38 41	55 46 49 54 53	74 69 71 (NA) 73	86 86 87 (NA) 89	482 (NA) (NA) (NA) (NA)	95 92 93 (NA) 94	99 98 94 (NA) 94	(X) (X) (X) 3 (X)
3851	Ophthalmic goods-----	1982-- 390 1977-- 593 1972-- 447 1970-- (NA) 1967-- 432  1966-- (NA) 1963-- 211 1958-- 226 1954-- 223 1947-- 175	1 273.0 971.8 568.3 516.0 426.0  346.8 272.7 191.5 157.9 121.2	45 45 56 54 51	56 56 66 63 58	74 70 77 (NA) 71	88 84 89 (NA) 84	975 (NA) (NA) (NA) (NA)	91 92 88 (NA) 88	98 98 97 (NA) 95	(X) (X) (X) 4 (X)
3861	Photographic equipment and supplies-----	1982-- 723 1977-- 702 1972-- 555 1970-- (NA) 1967-- 505  1966-- (NA) 1963-- 499 1958-- 450 1954-- (NA) 1947-- 346 1935-- (NA)	17 037.5 9 946.9 5 623.9 4 372.5 3 664.5  3 285.7 1 851.2 1 133.6 (NA) 457.5 (NA)	74 72 74 75 69	86 86 85 86 81	91 90 92 (NA) 89	94 94 95 (NA) 95	2 157 (NA) (NA) (NA) (NA)	94 95 95 (NA) 95	97 95 96 (NA) 97	(X) (X) (X) 1 (X)
3873	Watches, clocks, and watchcases <sup>12</sup> -----	1982-- 227 1977-- 283 1972-- 183	1 187.6 1 594.7 937.2	51 58 55	62 66 67	81 82 84	93 94 96	1 432 (NA) (NA)	95 91 87	93 95 95	(X) (X) (X)
39	MISCELLANEOUS MANUFACTURING INDUSTRIES										
3911	Jewelry, precious metal-----	1982-- 2 159 1977-- 2 165 1972-- 1 497 1970-- (NA) 1967-- 1 477  1966-- (NA) 1963-- 1 428 1958-- 1 300 1954-- 1 323 1947-- 1 342	3 039.1 2 107.0 1 124.6 904.3 741.8  693.8 481.9 303.3 258.1 248.2	16 18 21 21 23	22 24 26 (S) 28	33 35 35 (NA) 38	47 48 49 (NA) 49	91 (NA) (NA) (NA) (NA)	94 92 92 (NA) 91	97 97 96 (NA) 96	(X) (X) (X) 4 (X)
3914	Silverware and plated ware-----	1982-- 199 1977-- 247 1972-- 188 1970-- (NA) 1967-- 186	583.9 457.0 364.7 316.1 339.1	59 51 52 56 56	75 67 68 68 67	87 83 85 (NA) 82	94 92 94 (NA) 93	1 084 (NA) (NA) (NA) (NA)	96 93 94 (NA) 95	98 98 97 (NA) 99	(X) (X) (X) 4 (X)

See footnotes at end of table.

**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

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SIC code	Industry and year <sup>1</sup>	Companies <sup>2</sup> (number)	Value of shipments <sup>3</sup>					Herfindahl-Hirschman Index for 50 largest companies <sup>5</sup>	Primary product specialization ratio <sup>6</sup> (percent)	Coverage ratio <sup>7</sup> (percent)	Standard error of estimate <sup>8</sup> (percent)
			Total (million dollars)	Percent accounted for by <sup>4</sup> —							
				4 largest companies	8 largest companies	20 largest companies	50 largest companies				
39	MISCELLANEOUS MANUFACTURING INDUSTRIES—Con.										
3914	Silverware and plated ware—Con.										
	1966...	(NA)	325.1	55	66	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1963...	201	238.0	55	66	81	91	(NA)	95	98	(X)
	1958...	198	192.2	54	67	79	91	(NA)	95	98	(X)
	1954...	190	211.1	61	72	83	(NA)	(NA)	91	97	(X)
	1947...	221	221.6	61	72	82	(NA)	(NA)	98	97	(X)
	1935...	(NA)	(NA)	56	68	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3915	Jewelers' materials and lapidary work <sup>12</sup> -----										
	1982...	477	755.5	26	37	60	79	291	96	86	(X)
	1977...	650	685.2	17	27	48	70	(NA)	96	89	(X)
	1972...	566	323.3	18	29	51	71	(NA)	95	86	(X)
3931	Musical instruments-----										
	1982...	403	915.9	33	53	74	87	429	98	97	(X)
	1977...	400	924.9	31	53	78	91	(NA)	98	99	(X)
	1972...	310	617.5	38	60	82	94	(NA)	97	99	(X)
	1970...	(NA)	478.9	40	58	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967...	304	434.3	34	57	79	91	(NA)	97	98	(X)
	1966...	(NA)	437.3	36	57	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1963...	288	314.4	38	54	73	88	(NA)	97	92	(X)
3942	Dolls-----										
	1982...	233	402.7	36	49	71	90	688	90	66	(X)
	1977...	223	340.2	37	46	66	87	(NA)	94	59	(X)
	1972...	237	199.1	22	34	55	79	(NA)	99	68	(X)
	1970...	(NA)	169.9	21	35	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1967...	331	162.8	19	31	51	72	(NA)	99+	70	(X)
	1966...	(NA)	150.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963...	404	247.9	(D)	50	62	75	(NA)	80-85	87	(X)
	1958...	482	160.3	12	20	37	59	(NA)	98	94	(X)
	1954...	484	142.7	19	29	43	(NA)	(NA)	92	97	(X)
	1947...	374	69.8	39	48	62	(NA)	(NA)	89	98	(X)
3944	Games, toys, and children's vehicles <sup>12</sup> -----										
	1982...	732	4 476.0	41	58	76	87	527	89	91	(X)
	1977...	754	2 719.7	34	47	66	82	(NA)	86	93	(X)
	1972...	618	1 734.3	35	49	65	80	(NA)	86	92	(X)
3949	Sporting and athletic goods, n.e.c.-----										
	1982...	1 453	3 376.8	17	28	44	62	140	97	95	(X)
	1977...	1 757	2 425.1	21	28	41	59	(NA)	95	94	(X)
	1972...	1 441	1 729.2	28	37	50	66	(NA)	89	94	(X)
	1970...	(NA)	949.5	24	33	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967...	1 304	853.3	27	33	47	62	(NA)	95	91	(X)
	1966...	(NA)	805.1	27	34	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963...	1 361	704.7	37	44	52	64	(NA)	93	91	(X)
	1958...	1 167	542.5	41	49	58	69	(NA)	88	91	(X)
	1954...	1 007	293.7	21	31	47	(NA)	(NA)	90	86	(X)
	1947...	843	202.3	24	37	53	(NA)	(NA)	94	90	(X)
3951	Pens and mechanical pencils <sup>112</sup> -----										
	1982...	129	809.4	41	62	81	95	623	91	86	(X)
	1977...	133	669.8	50	64	80	94	(NA)	85	94	(X)
	1972...	112	310.5	47	63	82	96	(NA)	92	91	(X)
	1970...	(NA)	243.5	45	64	(NA)	(NA)	(NA)	(NA)	(NA)	3
	1967...	113	211.8	46	60	80	96	(NA)	93	92	(X)
	1966...	(NA)	216.4	46	60	(NA)	(NA)	(NA)	(NA)	(NA)	4
	1963...	122	185.5	48	60	79	94	(NA)	90	93	(X)
3952	Lead pencils and art goods-----										
	1982...	144	445.9	48	67	83	95	902	79	88	(X)
	1977...	127	275.9	49	68	84	97	(NA)	85	79	(X)
	1972...	136	198.8	41	64	82	95	(NA)	83	88	(X)
	1970...	(NA)	172.8	41	65	(NA)	(NA)	(NA)	(NA)	(NA)	2
	1967...	123	158.9	42	61	79	95	(NA)	85	93	(X)
	1966...	(NA)	159.6	39	57	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963...	140	121.6	37	55	75	94	(NA)	87	90	(X)
	1958...	138	93.4	44	60	(NA)	(NA)	(NA)	88	92	(X)
3953	Marking devices <sup>112</sup> -----										
	1982...	593	337.6	23	32	46	61	206	94	90	(X)
	1977...	583	248.7	29	38	51	66	(NA)	85	88	(X)
	1972...	584	180.0	31	38	49	63	(NA)	90	91	(X)
	1970...	(NA)	185.9	28	39	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1967...	561	146.3	30	43	54	67	(NA)	90	91	(X)
	1966...	(NA)	162.2	26	40	(NA)	(NA)	(NA)	(NA)	(NA)	11
	1963...	581	126.8	40	49	59	70	(NA)	84	90	(X)
	1958...	495	53.6	23	29	41	57	(NA)	96	86	(X)
	1954...	444	47.6	20	28	42	(NA)	(NA)	90	89	(X)
	1947...	415	27.5	16	25	40	(NA)	(NA)	89	89	(X)
	1935...	(NA)	(NA)	18	28	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3955	Carbon paper and inked ribbons-----										
	1982...	93	778.8	48	63	82	97	906	83	73	(X)
	1977...	78	344.0	47	63	85	99	(NA)	96	64	(X)
	1972...	72	237.5	37	58	83	99	(NA)	90	61	(X)
	1970...	(NA)	228.1	30	45	(NA)	(NA)	(NA)	(NA)	(NA)	6
	1967...	87	206.8	37	54	78	98	(NA)	94	79	(X)
	1966...	(NA)	196.5	38	56	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1963...	91	155.5	38	55	78	97	(NA)	83	73	(X)
	1958...	97	116.4	29	47	75	94	(NA)	91	89	(X)
	1954...	80	81.2	31	48	78	(NA)	(NA)	93	83	(X)
	1947...	63	48.6	32	53	83	(NA)	(NA)	90-100	90-100	(X)
	1935...	(NA)	(NA)	35	56	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3961	Costume jewelry-----										
	1982...	780	1 027.1	27	37	54	68	268	93	90	(X)
	1977...	837	816.6	23	33	47	63	(NA)	92	89	(X)
	1972...	764	471.6	17	27	41	59	(NA)	93	90	(X)
	1970...	(NA)	447.2	26	36	(NA)	(NA)	(NA)	(NA)	(NA)	5
	1967...	763	376.5	22	31	43	60	(NA)	95	92	(X)

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			Total (million dollars)	Percent accounted for by <sup>4</sup> —						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
39	MISCELLANEOUS MANUFACTURING INDUSTRIES—Con.									
3961	Costume jewelry—Con.									
	1966..	(NA)	335.0	25	33	(NA)	(NA)	(NA)	(NA)	6
	1963..	910	280.5	17	25	39	55	(NA)	95	(X)
	1958..	1 049	245.3	12	18	32	48	(NA)	95	(X)
	1954..	1 123	239.4	14	21	32	(NA)	(NA)	95	(X)
	1947..	855	170.3	24	33	48	(NA)	(NA)	90	(X)
3962	Artificial flowers .....									
	1982..	207	260.1	37	49	69	85	460	96	(X)
	1977..	222	180.2	38	49	67	84	(NA)	98	(X)
	1972..	260	108.7	33	44	61	79	(NA)	93	(X)
	1970..	(NA)	82.9	23	(S)	(NA)	(NA)	(NA)	(NA)	8
	1967..	319	84.7	19	28	47	70	(NA)	97	(X)
	1966..	(NA)	(73.5)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	18
	1963..	367	60.4	17	26	42	62	(NA)	97	(X)
	1958..	428	60.4	12	19	35	56	(NA)	98	(X)
	1954..	466	50.0	9	16	32	(NA)	(NA)	97	(X)
	1947..	443	39.5	10	17	33	(NA)	(NA)	97	(X)
3963	Buttons .....									
	1982..	110	124.2	37	56	77	93	517	93	(X)
	1977..	150	95.2	35	50	71	91	(NA)	98	(X)
	1972..	179	93.7	31	47	70	87	(NA)	94	(X)
	1970..	(NA)	95.1	29	45	(NA)	(NA)	(NA)	(NA)	5
	1967..	227	80.8	26	39	59	80	(NA)	97	(X)
	1966..	(NA)	72.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	13
	1963..	282	81.8	27	39	59	78	(NA)	96	(X)
	1958..	348	65.7	20	32	52	73	(NA)	98	(X)
	1954..	395	64.8	20	29	47	(NA)	(NA)	92	(X)
	1947..	412	59.5	20	32	52	(NA)	(NA)	93	(X)
	1935..	(NA)	(NA)	15	27	(NA)	(NA)	(NA)	(NA)	(X)
3964	Needles, pins, and fasteners .....									
	1982..	223	698.8	42	55	72	88	558	86	(X)
	1977..	249	674.2	50	61	73	87	(NA)	92	(X)
	1972..	244	574.7	48	59	73	88	(NA)	94	(X)
	1970..	(NA)	531.4	51	62	(NA)	(NA)	(NA)	(NA)	3
	1967..	262	385.3	47	58	71	86	(NA)	93	(X)
	1966..	(NA)	409.3	43	55	(NA)	(NA)	(NA)	(NA)	5
	1963..	314	337.3	34	47	64	81	(NA)	91	(X)
	1958..	359	214.8	35	47	64	80	(NA)	93	(X)
	1954..	349	203.1	44	56	68	(NA)	(NA)	82	(X)
	1947..	273	147.2	39	52	69	(NA)	(NA)	91	(X)
	1935..	(NA)	(NA)	63	76	(NA)	(NA)	(NA)	(NA)	(X)
3965	Brooms and brushes .....									
	1982..	320	818.1	18	31	51	74	180	90	(X)
	1977..	391	673.1	20	33	53	74	(NA)	91	(X)
	1972..	430	438.3	24	36	53	72	(NA)	92	(X)
	1970..	(NA)	408.6	31	42	(NA)	(NA)	(NA)	(NA)	2
	1967..	516	371.8	33	44	58	75	(NA)	90	(X)
	1966..	(NA)	374.4	32	42	(NA)	(NA)	(NA)	(NA)	6
	1963..	628	321.1	31	41	57	73	(NA)	89	(X)
	1958..	713	252.2	23	33	49	65	(NA)	87	(X)
	1954..	688	185.4	21	32	47	(NA)	(NA)	91	(X)
	1947..	698	179.8	22	36	54	(NA)	(NA)	94	(X)
3993	Signs and advertising displays .....									
	1982..	3 155	2 692.4	6	10	18	30	23	97	(X)
	1977..	3 373	1 738.7	6	11	19	30	(NA)	98	(X)
	1972..	3 221	1 198.1	6	10	18	29	(NA)	98	(X)
	1970..	(NA)	982.7	7	11	(NA)	(NA)	(NA)	(NA)	4
	1967..	3 159	875.1	6	10	17	28	(NA)	97	(X)
	1966..	(NA)	818.6	6	10	(NA)	(NA)	(NA)	(NA)	8
	1963..	3 165	646.8	5	8	15	26	(NA)	96	(X)
	1958..	2 689	446.9	5	8	14	26	(NA)	86	(X)
	1954..	2 600	353.3	8	11	18	(NA)	(NA)	93	(X)
	1947..	1 933	204.7	5	9	18	(NA)	(NA)	95	(X)
	1935..	(NA)	(NA)	9	14	(NA)	(NA)	(NA)	(NA)	(X)
3995	Burial caskets (1967 industry 3994) <sup>113</sup> .....									
	1982..	270	682.1	52	60	71	84	1 247	100	(X)
	1977..	376	505.9	36	48	62	75	(NA)	99	(X)
	1972..	474	391.9	25	34	47	63	(NA)	99	(X)
	1970..	(NA)	355.2	24	31	(NA)	(NA)	(NA)	(NA)	4
	1967..	527	306.1	22	28	42	58	(NA)	95	(X)
	1966..	(NA)	319.1	22	28	(NA)	(NA)	(NA)	(NA)	(X)
	1963..	581	290.0	20	27	41	57	(NA)	95	(X)
	1958..	562	226.6	21	28	42	56	(NA)	95	(X)
	1954..	541	166.1	20	26	38	(NA)	(NA)	97	(X)
	1947..	525	188.8	26	34	45	(NA)	(NA)	90	(X)
	1935..	(NA)	(NA)	17	23	(NA)	(NA)	(NA)	(NA)	(X)
3996	Hard surface floor coverings .....									
	1982..	12	604.1	99	99+	100	(X)	(D)	94	(X)
	1977..	20	607.2	90	97	100	(X)	(NA)	92	(X)
	1972..	18	342.3	91	98	100	(X)	(NA)	88	(X)
	1970..	(NA)	232.6	92	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	18	221.7	89	99	100	(X)	(NA)	86	(X)
	1966..	(NA)	230.3	89	98	(NA)	(NA)	(NA)	(NA)	8
	1963..	15	204.1	87	98	100	(X)	(NA)	82	(X)
	1958..	11	178.8	83	(D)	100	(X)	(NA)	(NA)	(X)
	1954..	10	181.6	87	(D)	100	(X)	(NA)	85	(X)
	1947..	14	173.3	80	95	100	(X)	(NA)	91	(X)
3999	Manufacturing industries, n.e.c. <sup>114</sup> .....									
	1982..	3 635	4 062.8	28	36	45	56	269	92	(X)
	1977..	3 921	2 662.0	18	25	35	47	(NA)	91	(X)
	1972..	3 313	1 534.7	12	19	30	43	(NA)	91	(X)
	1970..	(NA)	1 148.0	9	15	(NA)	(NA)	(NA)	(NA)	4
	1967..	2 165	943.3	10	17	28	42	(NA)	94	(X)

See footnotes at end of table.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

Note: Figures shown in parentheses either have associated standard errors exceeding 15 percent or are not consistent with other Census series and related data. Thus, these estimates may be of limited reliability.

<sup>1</sup>Industry codes and descriptions are based on the 1972 Standard Industrial Classification (SIC) Manual. This classification system represents a substantial revision from the previous 1957 edition as modified through 1967 and was put into effect with the final reports in the 1972 census. Concentration ratios in 1958 were tabulated on the 1945 edition to preserve comparability to prior years. Also, in 1958, establishments in Alaska and Hawaii were not included as part of U.S. industry totals since these States did not attain Statehood until 1959. Data and ratios for 1958 and prior years are shown in this report only if the industry definitions are so closely comparable that the concentration ratios could not be affected by the shifting of plants due to industry classification changes or by the change in treatment of Alaska and Hawaii. (See "Concentration Ratios in Manufacturing Industry: 1958," Part I, table 7, for comparability of old/new industry definitions.)

<sup>2</sup>Determination of company affiliation of establishments is based on census reports and publicly available records. Value of shipment totals or establishments have been summarized into company totals in each manufacturing industry. "Largest" companies are determined by each company's value of shipments in the specified industry.

<sup>3</sup>Value of shipments figures are not completely comparable between the years 1963 and 1972 and prior years. They include for all establishments classified in the industry (a) value of products primary to the industry; (b) value of all secondary products which are primary to other industries; (c) value of miscellaneous receipts, such as receipts for contract and commission work on materials owned by others, scrap, salable refuse, repairs, etc.; and (d) value of resales—that is, products resold in same condition as bought. In 1958 and prior years, value of resales was excluded from value of shipments.

<sup>4</sup>Percentages consist of the sum of value of shipments of the 4 largest companies (or 8, 20, or 50 companies), divided by total value of shipments of the industry.

<sup>5</sup>The Herfindahl-Hirschman Index is a new item for the 1982 Concentration publication and will not be available for prior years. The Herfindahl-Hirschman Index is a truncated index; it is the squares of the individual company ratios summed across the leading 50 companies or the complete universe whichever is lower. It is calculated by squaring the concentration ratio for each company and summing those squares to a cumulative total. The cumulative total (sum of the squares) is the Herfindahl-Hirschman Index. See the Explanatory Text for further discussion on the index.

<sup>6</sup>Primary product specialization ratio measures the extent to which plants classified in the industry specialize in making products regarded as primary to the industry; that is, value of shipments of primary products of plants in the industry is expressed as a ratio of the total shipments of all products made by these establishments (excluding miscellaneous receipts, such as receipts for contract and commission work on materials owned by others, scrap, salable refuse, repairs, etc.).

<sup>7</sup>Coverage ratio measures the extent to which all shipments of primary products of an industry are made by plants classified in the industry, as distinguished from secondary producers elsewhere; that is, value of shipments of the primary products made by plants classified in the industry is expressed as a ratio of the total shipments of primary products made by all producers, both in and out of the specified industry.

<sup>8</sup>A description of the standard error of estimate is given in appendixes under Qualifications of the Data. Percentage standard errors shown are approximate relative standard errors of level for the 1970 and 1966 Annual Survey of Manufactures data.

<sup>9</sup>Although the 1972 definition of this industry is the same as that used in the 1967 SIC system, the content of the industry has changed slightly. The net result of these changes accounts for less than 3 percent of the industry aggregate, and the 1972 data are considered to be directly comparable to prior-year data.

<sup>10</sup>Value added by manufacture is shown for this industry rather than value of shipments because the latter contains a substantial and unmeasurable amount of duplication. The calculations for the 4, 8, 20, and 50 largest companies also are based on value added. (See text for discussion on value added by manufacture.)

<sup>11</sup>For 1977, a small number of establishments conducting slaughtering activities were reclassified to industry 2016 from industry 2017 in accordance with industry definitions. As a result, the calculation of specialization and coverage ratios is not comparable with that for 1972. For 1972, industry 2015 was split to form industries 2016 and 2017.

<sup>12</sup>See 1977 Concentration Ratios in Manufacturing publication for historic data.

<sup>13</sup>Not completely comparable to 1954 and later years because of a change in industry classification. For discussion of 1947 to 1954 comparability, see 1954 Census of Manufactures, Volume II, Industry Statistics, Dairy Products.

<sup>14</sup>In 1954, industry 2027, Fluid Milk, was composed of two industries: 2026, Fluid Milk (Only); and 2027, Fluid Milk and Other Products. In 1954, figures on value of shipments and share of value of shipments accounted for by the 4 and 8 largest companies have been recalculated on a basis comparable to 1958. In 1947 and earlier years, establishments primarily distributing fluid milk were classified as nonmanufacturing.

<sup>15</sup>Value of production is shown for this industry rather than value of shipments. For 1963 and subsequent years, figure includes value of primary and secondary products made; miscellaneous receipts, such as receipts for contract and commission work on materials owned by others; scrap and other salable refuse; and the value of products bought and resold in the same condition. For 1958 and prior years, resales are excluded.

<sup>16</sup>For 1977, industry classification of several establishments changed to industry 2035 because of a change in products they produced. As a result, 1977 data are not completely comparable with data for prior years.

<sup>17</sup>For 1972, this industry was split to form a new industry 2038; in 1970 and prior years, the statistics for industry 2038 were included in industry 2037, Frozen Fruits and Vegetables.

<sup>18</sup>Establishments in Alaska and Hawaii are important producers in this industry. Recomputed figures cannot be shown for the 4, 8, 20, and 50 largest companies prior to 1963 without disclosing the data for individual companies in Alaska and Hawaii.

<sup>19</sup>The discrepancy between these figures and those appearing in table 1 of the 1958 Census of Manufactures, Volume II, Chapter 20H, Fats and Oils (82 companies and \$994,865,000 value of shipments) is due to a misclassification of 16 small companies into industry 2075. These companies should have been classified into industry 2079, Shortening and Cooking Oils.

<sup>20</sup>The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 2882, Linseed Oil Mills; and Industry 2884, Vegetable Oil Mills, N.E.C. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

<sup>21</sup>The 1963 SIC combined two industries which were separate in the 1945 SIC: Industry 2886, Grease and Tallow; and Industry 2889, Animal Oils, N.E.C. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

<sup>22</sup>The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 2092, Shortening and Cooking Oils; and Industry 2093, Margarine. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

<sup>23</sup>Includes data for 21 wholesale distributors of malt liquors. Each had less than 10 employees and had no significant effect on any of the statistics for the industry, except the establishment and company counts.

<sup>24</sup>Bonded store rooms which were engaged in blending wines were excluded in 1947.

<sup>25</sup>Data prior to 1977 are not directly comparable to later years data. In 1977, a total of 388 establishments were added to this industry accounting for \$505 million in value of production. In prior years, the additional establishments were erroneously listed in the administrative-record file as nonmanufacturing locations.

<sup>26</sup>The 1954 data for industry 2036 are not completely comparable to 1958 and subsequent years; 1947 data are not available. In 1947, industry 2036, Packaged Seafood, was, in part (frozen packaged seafood), included in industry 2037, Frozen Fruits, Vegetables, and Fish, and, in part (fresh packaged seafood), included in nonmanufacturing industries (principally industry 5046, Fish and Seafoods). A significant, but undetermined, number of establishments classified in industry 2036 in 1958 and 1963 were probably classified in industry 5046 in 1954.

<sup>27</sup>Jobs were included in 1947 but excluded in 1954 and later years.

<sup>28</sup>Value of production is shown for this industry in 1958 and prior years; whereas, value of shipments is shown for 1963 and later years. This change does not significantly affect the comparability. For industries 2253, 2254, and 2259, the method of computing coverage and specialization ratios was changed in 1967, causing a significant decrease in some ratios.

<sup>29</sup>The SIC codes combined in this industry are the two industries which were separate in the 1957 SIC: Industry 2255, Knit Glove Mills; and Industry 2259, Knitting Mills, N.E.C. The 1958 value of production figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

<sup>30</sup>For 1977, industry 2282 was redefined to exclude those establishments which produce filament yarn and texture it in the same plant. These establishments are now included in industries 2823 and 2824. New industry 2282 includes only those plants which purchase filament yarn for texturing.

<sup>31</sup>This industry included a large number of very small establishments in 1958, and there is a possibility that some were misclassified as to industry. Industry misclassification of these small establishments does not significantly affect any statistics other than the number of establishments and companies.

<sup>32</sup>This industry included a large number of very small establishments in 1963 and some of these small establishments may have been misclassified as to industry. Industry misclassification of these small establishments does not significantly affect any statistics other than the number of establishments and companies.

<sup>33</sup>The 1972 definition of this industry has been revised from that used in the 1967 SIC manual. In 1967, industry 2297 was titled Scouring and Combing Mill Products. This is now product class 22993 in industry 2299, Textile Goods, N.E.C. In 1967, Nonwoven Textiles was product class 22991 in industry 2299.

<sup>34</sup>For 1977, data are not comparable to other years data. 1977 figures cover only products made in cut-and-sew shops; other years figures also include products made in knitting mills.

<sup>35</sup>The 1957 SIC combined four industries which were separate in the 1945 SIC into this industry. Industry 2281, Fur-Felt Hats and Hat Bodies; Industry 2282, Wool-Felt Hats and Hat Bodies; Industry 2283, Straw Hats; and Industry 2325, Men's and Boys' Cloth Hats. The 1958 value of production figures for these four industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

<sup>36</sup>The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 2381, Fabric Dress Gloves; and Industry 2382, Fabric Work Gloves. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

<sup>37</sup>A review of the reports for 1963 indicated that there were approximately 300 very small companies included in this industry which described their activities as custom drapery producers, interior decorators' workrooms, etc. Approximately half of these companies were classified as nonmanufacturing in the 1958 census.

<sup>38</sup>For 1963 and subsequent years, value of shipments total includes shipments of logs for establishments that own and maintain timberlands but contract the cutting of logs to others. The establishments that actually performed the logging on a contract basis also reported their receipts for contract logging under the heading, total value of shipments. Thus, an undetermined amount of duplication exists in the shipments total. The figures previously reported for 1958 and prior years do not include shipments for timberland owners that do not perform their own logging.

<sup>39</sup>Comparable data prior to 1972 are not available due to a significant revision in the 1972 SIC system. This industry, as now constituted, includes wood frames for household furniture which were previously classified in industry 2512 under 1967 product class 25126.

<sup>40</sup>The low coverage ratio for 1963 was due to the large amount of wood chips manufactured by establishments classified in industry 2421. In 1967, wood chips were reclassified from industry 2429 to industry 2421.

<sup>41</sup>Comparable data prior to 1972 are not available due to a significant revision in the 1972 SIC system. Custom cabinetwork, to be built in (1967 product class 24317) was reclassified to industry 2434.

<sup>42</sup>Comparable data prior to 1972 are not available due to a major revision in the 1972 SIC system. Industry 2434 was formed by combining the manufacture of custom cabinetwork, to be built in (1967 product class 24317) with wood kitchen cabinets (1967 product class 25114).

<sup>43</sup>This industry was revised for 1972. Comparable data are not available. All products now classified in industry 2439 were formally part of old industry 2433, Prefabricated Wood Structures. The balance of old industry 2433 is now classified as industry 2452.

<sup>44</sup>Comparable data prior to 1972 are not available due to a major revision in the 1972 SIC system. This industry was previously identified under product class 24992 as a part of industry 2499.

<sup>45</sup>Comparable data prior to 1972 are not available due to a major revision in the 1972 SIC system. All products now classified in this industry were formerly part of industry 3791.

<sup>46</sup>Comparable data prior to 1972 are not available due to a major revision in the 1972 SIC system. All products now classified in industry 2452 were formerly part of old industry 2433. The balance of old industry 2433 is now classified as 2439.

<sup>47</sup>Comparable data prior to 1972 are not available due to a major revision in the 1972 SIC system. This industry was previously identified as product class 24993 under industry 2499.

<sup>48</sup>This industry was revised for 1972. Comparable data prior to 1972 are not available. This industry, as now constituted, excludes pallets and skids (1967 product class 24992) and particleboard (1967 product class 24993) which were reclassified to product classes 24480 and 24920, respectively.

<sup>49</sup>Comparable data prior to 1972 are not available due to a significant revision in the 1972 SIC system. Radio, phonograph, stereo wood cabinets, and sewing machine cabinets were reclassified to new SIC industry 2517, and wood kitchen cabinets were reclassified to new SIC industry 2434.

<sup>50</sup>Data for 1972 and subsequent years are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. The industry as now constituted excludes wood frames for household furniture (1967 product class 25126) which was reclassified to industry 2426.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

<sup>51</sup> Comparable data prior to 1972 are not available due to a significant revision in the 1972 SIC system. This industry was previously classified under industry 2511 as product class 25111 and product class 25112.
<sup>52</sup> Beginning with 1958, integrated pulp and paper companies were given the option of reporting their pulp and paper (or board) operations on a combined basis when both were conducted at a single physical location. Most integrated companies exercise this option and file a single report covering their pulp, paper (or board) making operations at a single physical location, but a few with departmental accounting choose to report separately for the pulp mill and paper (or board) mill. The other pulp mills separately reported are: (1) those exclusively selling their pulp on the market (that is, not associated or affiliated with a paper and board mill), and (2) those pulp mills affiliated or associated with paper or board mills but operated at a different physical location from the paper or board mill(s).
<sup>53</sup> This is a minimum ratio (the exact ratio is withheld to avoid disclosing data for individual companies).
<sup>54</sup> This industry was revised for 1972; comparable data prior to 1972 are not available. The stationery products which now constitute industry 2648 were classified in the 1967 SIC system in industry 2649 under product class 26491.
<sup>55</sup> Comparable data are not available for years prior to 1972 due to a significant revision in the 1972 SIC system. The industry as now constituted includes wallpaper (1967 SIC industry 2644) and excludes stationery products (1967 product class 26491).
<sup>56</sup> Data for 1972 and succeeding years are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. Industry 2751 was split into two separate industries: this industry and commercial printing, gravure (industry 2754, 1967 product classes 27517 and 27518).
<sup>57</sup> Data for 1972 and succeeding years are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. Industry 2752 was split into two separate industries: this industry and lithographic platemaking and related services (industry 2795, 1967 product class 27527).
<sup>58</sup> Comparable data for years prior to 1972 are not available due to a major revision in the 1972 SIC system; this industry was previously identified as product classes 27517 and 27518 under industry 2751.
<sup>59</sup> For 1982, data for industries 2793 and 2794 are combined.
<sup>60</sup> Comparable data for years prior to 1972 are not available due to a major revision in the 1972 SIC system; this industry was previously identified as product class 27527 under industry 2752.
<sup>61</sup> Comparable data for 1970 and earlier years are not available due to a significant revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of household bleaches to industry 2842; the manufacture of synthetic ammonia, nitric acid, and ammonium compounds to industry 2873; and the manufacture of phosphoric acid to industry 2874.
<sup>62</sup> Government-owned establishments that are privately operated are included in this industry but did not enter into the calculation of the specialization and coverage ratios as all dollar receipts for these establishments were included in "miscellaneous receipts."
<sup>63</sup> Comparable data are not available for 1970 and earlier years due to a significant revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of unsupported plastics film, sheets, rods, and tubes; regenerated cellulosic products, except rayon; and custom compounded purchased resins to industry 3079. In addition, the production of synthetic resin adhesives from resins manufactured in the same establishment, was transferred to industry 2981.
<sup>64</sup> Industry definition was revised for 1977 to include manmade fiber producers primarily engaged in the manufacture of textured fibers. These establishments were included in industry 2822 for 1972. Change represents approximately 6 percent of value of shipments for industry 2824.
<sup>65</sup> Includes textured filament yarn made from purchased filament yarn (primary product of industry 2282).
<sup>66</sup> This industry was revised for 1972; historical data are not available. The 1972 revisions transferred the manufacture of household insecticides and repellants from industry 2842 to industry 2879. In addition, the production of household liquid and dry bleaches was transferred from industry 2819 to industry 2842.
<sup>67</sup> Data for 1972 and subsequent years are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. Caulking and sealant compounds, formerly classified in product class 28518, were reclassified into industry 2891. The degree of change based on total employment is estimated to be 4 percent.
<sup>68</sup> Comparable data for 1970 and earlier years are not available due to a major revision in the 1972 SIC system. This industry was formed by combining synthetic ammonia, nitric acid, and ammonium compounds (1967 product class 28191); urea (part of 1967 product class 28182); and fertilizer materials of organic origin (part of 1967 product class 28712).
<sup>69</sup> Comparable data for 1970 and earlier years are not available due to a major revision in the 1972 SIC system. Industry 2874 was formed by combining most of the products of old industry 2871, which includes superphosphate, other phosphatic fertilizer materials, and mixed fertilizers produced from one or more materials made in the same plant, with phosphoric acid, which was previously classified in 1967 product class 28194 as part of industry 2819.
<sup>70</sup> Includes mixed fertilizers made by plants which mix fertilizers from purchased materials (primary products of industry 2875).
<sup>71</sup> Includes mixed fertilizers made by plants which manufacture fertilizer materials (primary products of industry 2874).
<sup>72</sup> Comparable data for 1970 and earlier years are not available due to a major revision in the 1972 SIC system. The industry as now constituted includes the manufacture of household insecticides and repellants which were previously classified as product class 28421 in industry 2842.
<sup>73</sup> Comparable data are not available for 1970 and earlier years due to a significant revision in the 1972 SIC system. This industry as now constituted includes synthetic resin adhesives from resins manufactured in the same establishment (formerly in industry 2821); caulking compounds and sealants (formerly in industry 2851); rubber cement (formerly in industry 3069); and sealants, n.e.c. (formerly in industry 2899); and excludes gelatin and sizes (now in industry 2899).
<sup>74</sup> Data for 1972 and subsequent years are not completely comparable to earlier data due to a slight revision in the 1972 SIC system. The industry as now constituted includes gelatin, except ready-to-eat desserts (formerly classified in industry 2891); sizes (formerly in industry 2891); and embalming chemicals (formerly in industry 3994); and excludes sealants, n.e.c. (now classified in industry 2991). The degree of change, based on total employment, is estimated to be 5 percent.
<sup>75</sup> Includes lubricating oils and greases which are also primary to Industry 2992, Lubricating Oils and Greases.
<sup>76</sup> Includes lubricating oils and greases which are also primary to Industry 2911, Petroleum Refining.
<sup>77</sup> Data prior to 1972 are not directly comparable to later years due to a significant revision in the 1972 SIC system. Plastics footwear, which was classified in industry 3079 in 1967, is now included in industry 3021. However, the degree of change based on total employment is estimated to be 11 percent.
<sup>78</sup> The rubber and plastics hose and belting industry is included for the first time in the census of manufactures for 1972. The industry includes all of 1967 Product Class 30691, Rubber and Plastics Belts and Belting; and Product Class 30692, Rubber Hose and Tubing, Except 30692 81, Tubing, Except Medical and Surgical and Reinforced; part of 1967 Product Class 30795, Industrial Plastics Products; and Product Class 30798, Consumer and Commercial Plastics Products, N.E.C.
<sup>79</sup> This industry was significantly revised for 1972. The statistics for this industry, as classified under the 1972 edition of the SIC manual, were unchanged as to code number from the previous classification, but were significantly changed in comparison with data classified by the previous system. All of 1967 Product Class 30691, Rubber and Plastics Belts and Belting and all of 1967 Product Class 30692, Rubber Hose and Tubing, Except Product Class 30692 81 Tubing, Except Medical and Surgical and Reinforced, are now classified in Industry 3041, Rubber and Plastics Hose and Belting, Tubing, Except Medical and Surgical and Reinforced, is now included in product class 30695. In addition, seals and packing (formerly product codes 30695 26, 27, and 28) are now included in industry 3293; and latex and solvent-type cement (formerly product codes 30698 64 and 65) are now classified in industry 3291.
<sup>80</sup> Data prior to 1972 are not directly comparable to later years due to a significant revision in the 1972 SIC system. The degree of change, based on total employment, is estimated to be 9 percent.
<sup>81</sup> Data prior to 1972 are not completely comparable to later data due to a significant revision in the 1972 SIC system. Industrial leather belting was reclassified to Industry 3199, Leather Goods, N.E.C.
<sup>82</sup> The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 3192, Saddlery, Harness, and Whips, and this industry. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and 1986.
<sup>83</sup> Company count includes a small number of administrative records which have no apparent effect on total value of shipments or percent of value of shipments accounted for by the largest companies.
<sup>84</sup> Data prior to 1972 are not directly comparable to later years due to a significant revision in the 1972 SIC system. Insulation materials containing asbestos, which were previously classified in industry 3293, are now included in this industry. However, the degree of change, based on total employment, is estimated to be 4 percent.
<sup>85</sup> Revised percentages not available.
<sup>86</sup> Although the SIC number and title of industry 3293 are unchanged, the 1972 definition of this industry has been revised from that used in the 1967 SIC manual. Molded packings and seals, except plastics (formerly classified in industry 3069); axial mechanical face seals (formerly in industry 3599); plastics packing and seals (formerly in industry 3079) and leather packings; oil and grease retainers, including seals (formerly in industry 3121), are now included in this industry. Also, insulation materials containing asbestos, which were previously classified in this industry, are included in industry 3292 for 1972.
<sup>87</sup> Industry 3312, Blast Furnaces and Steel Mills, has been redefined since 1954 to include Industry 3311, Blast Furnaces; Industry 3312, Steelworks and Rolling Mills; Industry 2931, Beehive Coke Ovens; and Industry 2932, Byproduct Coke Ovens. For 1954 and 1947, value added by manufacture and shares accounted for by the largest 4, 8, and 20 companies have been recomputed on a basis comparable to later years.
<sup>88</sup> This ratio is based on shipments of primary products only by this industry. However, some of these products are also primary to one or more other industries.
<sup>89</sup> This industry includes, in addition to commercial (jobbing) foundries, "captive" foundries at separate locations producing gray iron castings for other plants of the same company. Accordingly, the ratios for this industry do not reflect the market shares in the commercial foundry industry as such.
<sup>90</sup> Indexes not meaningful because of large miscellaneous receipts, particularly receipts for contract and commission work on materials owned by others. Such receipts are treated as primary products for this industry.
<sup>91</sup> A number of small establishments was misclassified into this industry. This affects the figure for the number of companies but has no appreciable effect on the total value of shipments or the percentage of value of shipments accounted for by the largest companies.
<sup>92</sup> The 1957 SIC combined three industries which were separate in the 1945 SIC: Industry 3422, Edge Tools; Industry 3423, Hand Tools, N.E.C.; and Industry 3424, Files. The 1958 value of shipments figures for these three industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.
<sup>93</sup> This industry was revised for 1972; historical data are tabulated under the old definition and are not directly comparable. Warm air furnaces (old product class 34332) and parts and attachments for warm air furnaces (old product code 34336 73) are classified in Industry 3585, Refrigeration and Heating Equipment.
<sup>94</sup> Comparable data are not available for 1970 and earlier years.
<sup>95</sup> Not completely comparable to 1966 and earlier years, some companies included construction receipts with value of shipments for those years. Such receipts are excluded in 1967.
<sup>96</sup> For 1972, the content of this industry has been slightly changed by the inclusion of automatic stacking machines and parts and attachments. The effect of this change on the industry is approximately 5 percent. These products were formerly classified in industry 3537.
<sup>97</sup> Data prior to 1977 for Industries 3546, Power Driven Hand Tools, and 3553, Woodworking Machinery, are not comparable. Plants primarily engaged in manufacturing chain saws were tabulated in industry 3546 in 1977, in industry 3553 in 1972. These plants had industry shipments totaling \$430.8 million in 1977.
<sup>98</sup> Comparable data are not available for 1966 and earlier years because of significant changes in the 1967 SIC system of plants or products of this industry.
<sup>99</sup> Comparable data are not available for prior years as this industry was not separately identified prior to 1967.
<sup>100</sup> Prior to 1982, concentration ratios were based on value added for this industry. The ratios based on shipments are not known but are expected to be similar to those shown. The dollar figures shown are value of shipments for all years.
<sup>101</sup> Separate data cannot be published for industry 3572, typewriters, without revealing the data for individual companies. Accordingly, this industry has been combined with Industry 3579, Office Machines, N.E.C.
<sup>102</sup> For 1972, data for coin-operated washers and dryers less than 10-pound load, and parts and attachments for these products have been moved to Industry 3633, Household Laundry Equipment. Products shifting out of this industry represent approximately 15 percent of the total shipments value at the United States level.
<sup>103</sup> Comparable data are not available due to significant revisions in the 1954 classification of plants or products in this industry.
<sup>104</sup> Industries 3671, Electron Tubes, Receiving Type; 3672, Cathode Ray Television Picture Tubes; and 3673, Electron Tubes, Transmitting, are combined in this table. Separate data for each industry could not be published without disclosing data for individual companies.
<sup>105</sup> Industry 3716, Motor Homes Produced on Purchased Chassis, was created as a separate industry in 1977 from Industry 3713, Trucks and Bus Bodies. Data for 1977 for industry 3713 are not comparable to prior years.



**Table 5. Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1982 and Earlier Years—Con.**

<sup>106</sup>Value of shipments, rather than value of work done, has been used in this industry since 1970.  
<sup>107</sup>Value of work done rather than value of shipments.  
<sup>108</sup>Not completely comparable to 1958 and later years because of a change in the SIC system. In 1958 and later years, an establishment manufacturing complete aircraft was classified in industry 3721. Aircraft, if its value of work done on aircraft exceeded its value of shipments of any other single industry's products. In 1954 and earlier years, any establishment manufacturing at least one complete aircraft was classified in industry 3721.  
<sup>109</sup>This industry was revised for 1972; historical data are tabulated under the old definition and are not comparable. Farm wagons and other farm transportation equipment (1967 product class 37992, part) were reclassified to industry 3523. Other automobile trailers (1967 product class 37991, part) were reclassified to industry 3792; self-propelled golf carts, classified in this industry prior to 1972, were reclassified into product class 37997.  
<sup>110</sup>In 1967, Industry 3821, Mechanical Measuring Devices, was split into three industries: 3823, Process Control Instruments; 3824, Fluid Meters and Counting Devices; and 3829, Measuring and Controlling Devices, N.E.C.  
<sup>111</sup>This industry and 1967 Industry 3831, Optical Instruments and Lenses, are not directly comparable; also, this industry is a combination of two 1967 industries: 1941, Sighting and Fire Control Equipment, and 3831, Optical Instruments and Lenses. No 1967 concentration data were published for industry 1941. However, from the final industry bulletin MC-72(2)-38A, table 1C, it can be seen that 4 percent of the total value of shipments for this industry in 1972 came from 1967 industry 1941.  
<sup>112</sup>Data prior to 1972 are not directly comparable to later years data due to a significant revision in the industry's SIC system. Broad-tipped markers, formerly in industry 3953 (product code 39530 43), are now included in industry 3951 (product code 39510 43). However, the degree of change (based on total employment) for industry 3951 and industry 3953 are 6 percent and 8 percent, respectively.  
<sup>113</sup>Data prior to 1972 are not directly comparable to later years data due to a significant revision in the industry's SIC system. Data for embalming chemicals are now included in Industry 2899, Chemical Preparations, N.E.C.; burial garments in Industry 2389, Apparel and Accessories, N.E.C.; and innerliners, sold as such, in Industry 2399, Fabricated Textile Products, N.E.C. However, the degree of change (based on total employment) is less than 1 percent.  
<sup>114</sup>The 1967 SIC combined into this industry six industries which were separate in the 1957 SIC: Industry 3983, Matches; 3984, Candles; 3987, Lamp Shades; 3992, Furs, Dressed and Dyed; 3995, Umbrellas, Parasols and Canes; and 3999, Miscellaneous Products, N.E.C. Concentration ratio data are not available for 1966 or prior years.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
20	FOOD AND KINDRED PRODUCTS							
2011-	Meat packing plant products -----	1982..	<sup>\$40</sup> 522.6	27	40	57	73	300
		1977..	<sup>\$27</sup> 875.7	21	33	50	66	(NA)
		1972..	<sup>\$21</sup> 637.3	26	39	53	67	(NA)
		1967..	<sup>\$14</sup> 665.2	27	38	49	62	(NA)
		1963..	<sup>\$11</sup> 768.7	30	40	50	62	(NA)
		1958..	<sup>\$11</sup> 257.0	33	44	54	64	(NA)
20111	Beef, not canned or made into sausage -----	1982..	20 606.7	44	55	70	83	709
		1977..	14 095.8	25	36	53	69	(NA)
		1972..	11 790.1	30	42	58	72	(NA)
		1967..	7 398.5	26	35	49	63	(NA)
		1963..	5 707.8	26	34	46	59	(NA)
		1958..	5 019.4	31	38	49	61	(NA)
		1954..	3 943.1	36	43	51	(NA)	(NA)
20112	Veal, not canned or made into sausage -----	1982..	361.1	55	74	93	99 +	1 071
		1977..	319.3	32	56	85	98	(NA)
		1972..	241.5	27	46	70	91	(NA)
		1967..	307.7	37	50	68	86	(NA)
		1963..	310.8	36	44	60	78	(NA)
		1958..	414.1	41	50	65	80	(NA)
		1954..	397.6	49	56	67	(NA)	(NA)
20113	Lamb and mutton, not canned or made into sausage -----	1982..	270.8	59	86	99	100	1 101
		1977..	329.5	58	82	97	99 +	(NA)
		1972..	330.4	55	76	96	99 +	(NA)
		1967..	312.7	57	73	91	99	(NA)
		1963..	300.1	54	67	85	97	(NA)
		1958..	305.2	60	69	85	96	(NA)
		1954..	298.5	61	74	87	(NA)	(NA)
20114	Pork, fresh and frozen -----	1982..	8 071.8	39	59	83	96	597
		1977..	5 647.5	37	55	78	95	(NA)
		1972..	4 221.0	37	50	73	91	(NA)
		1967..	2 791.0	33	48	68	87	(NA)
		1963..	2 202.5	36	50	67	83	(NA)
		1958..	2 124.3	39	53	69	83	(NA)
		1954..	1 928.8	42	56	69	(NA)	(NA)
20115	Lard -----	1982..	239.6	40	62	85	99	608
		1977..	214.1	39	59	83	97	(NA)
		1972..	171.0	37	59	78	92	(NA)
		1967..	182.2	33	51	71	87	(NA)
		1963..	223.6	33	51	71	85	(NA)
		1958..	332.0	41	58	75	87	(NA)
		1954..	383.2	45	63	78	(NA)	(NA)
20116	Pork, processed or cured (not canned or made into sausage), made in meat packing plants (also see code 20136) -----	1982..	<sup>\$3</sup> 042.0	34	50	78	97	459
		1977..	<sup>\$2</sup> 095.3	31	49	76	94	(NA)
		1972..	<sup>\$1</sup> 443.3	34	48	69	88	(NA)
		1967..	<sup>\$1</sup> 324.0	30	47	67	85	(NA)
		1963..	<sup>\$1</sup> 176.1	33	49	66	82	(NA)
		1958..	<sup>\$1</sup> 349.0	37	56	71	84	(NA)
20117	Sausage and similar products (not canned) made in meat packing plants (also see code 20137) -----	1982..	<sup>\$2</sup> 867.8	36	48	70	91	467
		1977..	<sup>\$1</sup> 859.3	29	41	63	86	(NA)
		1972..	<sup>\$1</sup> 340.7	26	38	58	80	(NA)
		1967..	<sup>\$1</sup> 353.4	27	40	57	75	(NA)
		1963..	<sup>\$850</sup> 6	27	41	56	72	(NA)
		1958..	<sup>\$836</sup> 0	28	39	54	68	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
20	FOOD AND KINDRED PRODUCTS—Con.							
2011- 20118	Meat packing plant products—Con. Canned meats, except animal and baby foods, 20 percent or more meat, by slaughters (also see code 20138) <sup>6</sup> -----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>5</sup> 658.2 <sup>5</sup> 561.7 <sup>5</sup> 622.1 <sup>5</sup> 490.4 <sup>5</sup> 482.2 <sup>5</sup> 406.5	74 59 68 57 58 62	94 83 87 82 81 83	99+ 99+ 99+ 98 98 97	100 100 100 100 100 99	(X) (NA) (NA) (NA) (NA) (NA)
20119	Hides, skins, and pelts -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	867.1 807.7 580.4 276.3 223.4 295.7 225.5	38 23 30 32 33 33 43	47 35 41 43 41 39 49	65 53 56 55 53 (NA) 57	81 72 72 69 67 (NA) (NA)	526 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
2011A	Byproducts of meat packing plants, except sausage casings <sup>7</sup> -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	270.2 235.7 126.8 100.7 87.8 105.7 109.0	37 (S) (S) (S) 37 49 61	52 (S) (S) (S) 61 63 69	72 (S) (S) (S) (NA) (NA) 79	89 (S) (S) (S) (NA) (NA) (NA)	505 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
20110	Fresh and frozen meat from animals slaughtered in same establishment, n.s.k. <sup>6</sup> 7 -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	3 267.3 1 709.8 823.2 461.0 203.8 169.2 60.5	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA) (NA)
2013-	Sausages and other prepared meats -----	1982... 1977... 1972... 1967... 1963... 1958...	10 508.2 7 146.8 3 905.1 2 583.1 1 798.7 1 494.5	15 18 16 15 14 16	25 27 25 22 21 24	38 41 37 36 35 (NA)	54 58 53 51 50 (NA)	108 (NA) (NA) (NA) (NA) (NA) (NA)
20136	Pork, processed, cured, or frozen, not canned or made into sausage, not made in slaughtering plants (also see code 20116) ---	1982... 1977... 1972... 1967... 1963... 1958...	<sup>5</sup> 2 278.5 <sup>5</sup> 1 683.3 <sup>5</sup> 985.9 <sup>5</sup> 684.0 <sup>5</sup> 458.6 <sup>5</sup> 472.7	26 26 24 20 21 23	40 41 35 31 34 36	63 65 54 53 56 58	85 84 75 76 76 80	296 (NA) (NA) (NA) (NA) (NA) (NA)
20137	Sausage and similar products, not canned, not made in slaughtering plant (also see code 20117) -----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>5</sup> 3 640.2 <sup>5</sup> 2 820.7 <sup>5</sup> 1 923.7 <sup>5</sup> 1 265.9 <sup>5</sup> 905.6 <sup>5</sup> 690.2	30 31 23 22 18 19	40 42 31 30 25 25	54 56 43 41 37 36	71 72 59 55 51 51	299 (NA) (NA) (NA) (NA) (NA) (NA)
20138	Canned meats, exc. animal and baby foods, with 20 percent or more meat, not made by slaughters (also see code 20118) <sup>6</sup> -----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>5</sup> 890.4 <sup>5</sup> 694.6 <sup>5</sup> 472.0 <sup>5</sup> 366.0 <sup>5</sup> 247.9 <sup>5</sup> 192.1	50 43 34 33 34 34	70 64 51 49 48 48	93 88 77 71 74 75	100 99+ 97 94 95 96	884 (NA) (NA) (NA) (NA) (NA) (NA)
2013A	Natural and collagen sausage casings <sup>8</sup> -----	1982... 1977... 1972... 1967... 1963...	59.8 <sup>9</sup> 33.2 114.9 83.4 91.7	73 36 40 32 37	86 58 58 52 54	98 87 79 79 77	100 99+ 97 95 94	2 319 (NA) (NA) (NA) (NA) (NA)
2013B	Other processed, frozen, or cooked meats <sup>10</sup> -----	1982...	1 764.9	20	36	65	87	255
20130	Sausage and other prepared meats, n.s.k. <sup>10</sup> -----	1982...	1 874.4	(X)	(X)	(X)	(X)	(X)
2016-	Poultry dressing plant products -----	1982... 1977...	8 658.8 5 291.9	22 17	37 28	61 49	83 73	254 (NA)
20161	Young chickens, including frozen, slaughtered in same establishment (also see code 20171) <sup>11</sup> -----	1982... 1977...	<sup>5</sup> (D) <sup>5</sup> (D)	(D) (D)	(D) (D)	(D) (D)	(D) (D)	(X) (NA)
20162	Hen and/or fowl (including frozen, whole, or parts) slaughtered in same establishment (also see code 20172) <sup>11</sup> -----	1982... 1977...	<sup>5</sup> (D) <sup>5</sup> (D)	(D) (D)	(D) (D)	(D) (D)	(D) (D)	(X) (NA)
20163	Turkeys (including frozen, whole, or parts) slaughtered in same establishment (also see code 20173) <sup>11</sup> -----	1982... 1977...	<sup>5</sup> (D) <sup>5</sup> (D)	(D) (D)	(D) (D)	(D) (D)	(D) (D)	(X) (NA)
20164	Other poultry and small game, including frozen, slaughtered in same establishment (also see code 20174) <sup>11</sup> -----	1982... 1977...	<sup>5</sup> (D) <sup>5</sup> (D)	(D) (D)	(D) (D)	(X) (D)	(X) (D)	(X) (NA)
20165	Processed poultry and small game, except soups, slaughtered in same establishment (also see code 20175) <sup>11</sup> -----	1982... 1977...	<sup>5</sup> (D) 331.4	(D) 70	(D) 85	(D) 98	(D) 100	(X) (NA)
20160	Poultry dressing plant products, n.s.k. -----	1982... 1977...	406.5 116.1	(X) (X)	(X) (X)	(X) (X)	(X) (X)	(X) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
2017-	Poultry and egg processing ----- 1982..	1 451.2	20	31	53	79	217
	1977..	1 066.5	21	34	55	85	(NA)
20171	Young chickens (frozen) including broilers, fryers, roasters, and capons (also see code 20161) <sup>11</sup> ----- 1982..	<sup>5</sup> (D)	(D)	(D)	(X)	(X)	(X)
	1977..	<sup>5</sup> (D)	(D)	(D)	(X)	(X)	(NA)
20172	Hens and/or fowl, frozen, (whole or parts) from purchased carcasses (also see code 20162) <sup>11</sup> ----- 1982..	<sup>5</sup> (D)	(D)	(X)	(X)	(X)	(X)
	1977..	<sup>5</sup> (D)	(D)	(D)	(X)	(X)	(NA)
20173	Turkeys, frozen, (whole or parts) from purchased carcasses (also see code 20163) <sup>11</sup> ----- 1982..	<sup>5</sup> (D)	(D)	(X)	(X)	(X)	(X)
	1977..	<sup>5</sup> (D)	(D)	(D)	(X)	(X)	(NA)
20174	Other poultry and small game, frozen, (whole or parts) from purchased carcasses (also see code 20164) <sup>11</sup> ----- 1982..	<sup>5</sup> (D)	(D)	(X)	(X)	(X)	(X)
	1977..	<sup>5</sup> (D)	(D)	(X)	(X)	(X)	(NA)
20175	Processed poultry and small game, except soups, from purchased carcasses (also see code 20165) <sup>11</sup> ----- 1982..	<sup>5</sup> (D)	(D)	(D)	(D)	(D)	(X)
	1977..	<sup>5</sup> 657.7	45	62	95	100	(NA)
20179	Liquid, dried and frozen eggs (1972 product class 20172) ----- 1982..	329.7	33	49	80	100	(X)
	1977..	312.7	30	49	85	100	(NA)
	1972..	156.7	36	53	82	100	(NA)
	1967..	159.6	43	58	82	99+	(NA)
	1963..	139.7	33	48	74	98	(NA)
	1958..	150.7	30	45	73	97	(NA)
	1954..	148.0	34	51	76	(NA)	(NA)
20170	Poultry and egg processing, n.s.k.----- 1982..	157.2	(X)	(X)	(X)	(X)	(X)
	1977..	96.1	(X)	(X)	(X)	(X)	(NA)
20210	Creamery butter ----- 1982..	1 975.7	29	44	72	94	377
	1977..	1 109.7	30	42	64	84	(NA)
	1972..	791.1	37	47	61	78	(NA)
	1967..	836.5	14	20	33	51	(NA)
	1963..	820.4	8	14	25	40	(NA)
	1958..	802.3	11	15	24	37	(NA)
	1954..	858.5	14	19	28	(NA)	(NA)
2022-	Cheese, natural and processed ----- 1982..	9 486.9	35	46	60	74	534
	1977..	5 528.1	38	50	62	75	(NA)
	1972..	2 753.5	40	51	62	74	(NA)
	1967..	1 533.8	45	53	62	71	(NA)
	1963..	1 070.0	45	50	59	68	(NA)
20223	Natural cheese, except cottage cheese <sup>12</sup> ----- 1982..	5 625.6	31	41	56	76	344
20224	Process cheese and related products <sup>12</sup> ----- 1982..	3 194.3	64	78	90	97	1 592
20225	Cheese substitutes <sup>12</sup> ----- 1982..	239.7	85	100	(X)	(X)	2 702
20220	Cheese, natural and processed, n.s.k. ----- 1982..	427.2	(X)	(X)	(X)	(X)	(X)
	1977..	282.3	(X)	(X)	(X)	(X)	(NA)
	1972..	219.5	(X)	(X)	(X)	(X)	(NA)
	1967..	142.1	(X)	(X)	(X)	(X)	(NA)
2023-	Condensed and evaporated milk ----- 1982..	5 041.4	33	48	67	86	398
	1977..	3 086.1	32	47	65	83	(NA)
	1972..	1 722.6	34	52	66	80	(NA)
	1967..	1 422.7	35	47	61	73	(NA)
	1963..	1 104.5	33	42	55	70	(NA)
	1958..	977.9	38	48	58	72	(NA)
20235	Dry milk products, except substitutes <sup>13</sup> ----- 1982..	2 425.4	33	47	71	94	400
20236	Canned milk products, except substitutes <sup>13</sup> ----- 1982..	1 199.1	74	94	100	(X)	2 114
20237	Concentrated milk products (bulk), except substitutes <sup>13</sup> ----- 1982..	370.9	35	56	85	99	519
20238	Ice cream mix and related products (1977 product class 20234) ----- 1982..	531.0	21	35	58	82	229
	1977..	293.2	22	36	60	85	(NA)
	1972..	227.7	16	30	50	72	(NA)
	1967..	201.1	15	26	44	70	(NA)
	1963..	157.8	17	26	45	69	(NA)
	1958..	118.5	23	35	56	77	(NA)
	1954..	119.5	24	33	46	(NA)	(NA)
20239	Dairy product substitutes <sup>13</sup> ----- 1982..	353.3	66	84	96	100	1 522
20230	Dry milk products, n.s.k. ----- 1982..	161.7	(X)	(X)	(X)	(X)	(X)
	1977..	121.0	(X)	(X)	(X)	(X)	(NA)
	1972..	55.0	(X)	(X)	(X)	(X)	(NA)
	1967..	34.8	(X)	(X)	(X)	(X)	(NA)
	1963..	3.9	(X)	(X)	(X)	(X)	(NA)
	1958..	2.0	(X)	(X)	(X)	(X)	(NA)
20240	Ice cream and ices ----- 1982..	3 281.1	22	32	49	72	214
	1977..	2 229.4	27	36	53	71	(NA)
	1972..	1 519.3	27	37	54	70	(NA)
	1967..	1 273.6	32	42	57	68	(NA)
	1963..	1 210.0	34	43	57	65	(NA)
	1958..	1 137.7	35	44	54	62	(NA)
	1954..	954.3	33	41	52	(NA)	(NA)
2026-	Fluid milk ----- 1982..	15 517.4	15	26	45	63	136
	1977..	11 602.8	17	26	43	58	(NA)
	1972..	7 662.5	17	26	41	54	(NA)
	1967..	6 603.4	21	29	40	49	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
20	FOOD AND KINDRED PRODUCTS—Con.							
2026-	Fluid milk—Con.							
	1963--	6 016.6	22	29	38	46	(NA)	
	1958--	5 577.0	23	29	37	44	(NA)	
20261	Bulk fluid milk and cream -----	1982--	3 037.6	28	40	62	81	308
	1977--	2 123.8	25	38	57	75	(NA)	
	1972--	1 258.8	23	34	53	72	(NA)	
	1967--	923.5	17	27	42	60	(NA)	
	1963--	950.5	15	22	34	50	(NA)	
	1958--	817.5	16	24	38	53	(NA)	
	1954--	715.6	18	27	39	(NA)	(NA)	
20262	Packaged fluid milk and related products -----	1982--	9 115.0	18	31	50	69	179
	1977--	7 345.5	18	30	46	62	(NA)	
	1972--	5 078.9	19	29	45	59	(NA)	
	1967--	4 454.9	25	34	45	55	(NA)	
	1963--	4 285.1	25	32	42	50	(NA)	
	1958--	4 110.3	26	32	40	47	(NA)	
20263	Cottage cheese -----	1982--	683.2	29	46	69	89	352
	1977--	545.6	25	38	62	84	(NA)	
	1972--	340.9	27	41	62	81	(NA)	
	1967--	218.0	36	50	68	81	(NA)	
	1963--	189.1	32	45	58	72	(NA)	
	1958--	185.3	32	44	58	70	(NA)	
20265	Yogurt, except frozen <sup>14</sup> -----	1982--	403.7	63	79	93	99+	1 593
20266	Other packaged milk products, n.e.c. <sup>14</sup> -----	1982--	699.3	31	44	63	77	392
20260	Fluid milk, n.s.k.-----	1982--	1 578.7	(X)	(X)	(X)	(X)	(X)
	1977--	736.3	(X)	(X)	(X)	(X)	(NA)	
	1972--	560.9	(X)	(X)	(X)	(X)	(NA)	
	1967--	721.0	(X)	(X)	(X)	(X)	(NA)	
	1963--	339.2	(X)	(X)	(X)	(X)	(NA)	
	1958--	250.9	(X)	(X)	(X)	(X)	(NA)	
2032-	Canned specialties -----	1982--	<sup>153</sup> 484.6	59	73	86	95	1 337
	1977--	<sup>152</sup> 429.0	59	73	87	96	(NA)	
	1972--	<sup>151</sup> 629.9	62	76	89	96	(NA)	
	1967--	<sup>151</sup> 190.7	64	77	88	96	(NA)	
	1963--	<sup>15</sup> 946.6	69	79	89	96	(NA)	
20321	Canned baby foods, except cereal and biscuits <sup>6</sup> -----	1982--	<sup>15</sup> 596.4	100	(X)	(X)	(X)	(D)
	1977--	<sup>15401.3</sup>	98	(D)	100	(X)	(NA)	
	1972--	<sup>15346.7</sup>	95	99	99+	100	(NA)	
	1967--	<sup>15246.3</sup>	93	98	100	(X)	(NA)	
	1963--	<sup>15230.8</sup>	95	99	100	(X)	(NA)	
	1958--	<sup>15185.2</sup>	94	99	100	(X)	(NA)	
	1954--	<sup>15148.7</sup>	(D)	100	(X)	(X)	(NA)	
20323	Canned dry beans-----	1982--	<sup>15753.3</sup>	48	67	92	100	847
	1977--	<sup>15556.5</sup>	51	68	90	100	(NA)	
	1972--	<sup>15305.8</sup>	50	68	89	99+	(NA)	
	1967--	<sup>15246.1</sup>	49	64	86	98	(NA)	
	1963--	<sup>15200.3</sup>	44	63	85	97	(NA)	
	1958--	<sup>15166.9</sup>	46	63	81	94	(NA)	
20322 20324 20320	Soups and other canned specialties and canned specialties, n.s.k. -----	1982--	2 035.0	71	80	(NA)	(NA)	(NA)
	1977--	1 471.2	67	80	(NA)	(NA)	(NA)	
	1972--	977.4	64	86	(NA)	(NA)	(NA)	
	1967--	698.3	83	89	(NA)	(NA)	(NA)	
	1963--	515.5	84	89	(NA)	(NA)	(NA)	
2033-	Canned fruits and vegetables -----	1982--	<sup>159</sup> 255.3	20	33	52	71	200
	1977--	<sup>156</sup> 621.4	19	31	53	72	(NA)	
	1972--	<sup>153</sup> 922.7	18	29	51	69	(NA)	
	1967--	<sup>153</sup> 222.3	23	35	52	68	(NA)	
	1963--	<sup>152</sup> 585.8	24	35	49	64	(NA)	
20331	Canned fruits, except baby foods -----	1982--	<sup>151</sup> 590.6	44	57	81	96	644
	1977--	<sup>151</sup> 289.3	37	51	78	93	(NA)	
	1972--	<sup>15828.4</sup>	35	50	75	92	(NA)	
	1967--	<sup>15818.3</sup>	34	51	75	90	(NA)	
	1963--	<sup>15721.7</sup>	37	52	73	86	(NA)	
20332	Canned vegetables, except hominy and mushrooms -----	1982--	<sup>152</sup> 047.2	35	49	72	91	511
	1977--	<sup>151</sup> 650.9	38	49	70	89	(NA)	
	1972--	<sup>151</sup> 067.1	35	46	64	85	(NA)	
	1967--	<sup>15957.5</sup>	38	46	61	78	(NA)	
	1963--	<sup>15767.7</sup>	34	41	55	71	(NA)	
20333	Canned hominy and mushrooms -----	1982--	<sup>15139.0</sup>	69	87	99+	100	1 671
	1977--	<sup>15149.8</sup>	53	73	96	100	(NA)	
	1972--	<sup>1598.2</sup>	39	57	89	100	(NA)	
	1967--	<sup>1551.6</sup>	39	62	91	100	(NA)	
	1963--	<sup>1539.0</sup>	34	55	90	100	(NA)	
	1958--	<sup>1534.8</sup>	37	57	90	100	(NA)	
20335	Canned vegetable juices -----	1982--	<sup>15270.3</sup>	73	82	96	100	2 814
	1977--	<sup>15251.8</sup>	67	81	95	100	(NA)	
	1972--	<sup>15155.7</sup>	62	76	92	99+	(NA)	
	1967--	<sup>15104.2</sup>	62	72	88	98	(NA)	
	1963--	<sup>1591.1</sup>	55	69	86	98	(NA)	
	1958--	<sup>1593.3</sup>	58	69	84	96	(NA)	
	1954--	<sup>1564.5</sup>	58	69	81	(NA)	(NA)	

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
20	FOOD AND KINDRED PRODUCTS—Con.							
2033- 20336	Canned fruits and vegetables—Con. Catsup and other tomato sauces, pastes, etc.-----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>152</sup> 174.4 <sup>151</sup> 350.0 <sup>15603.3</sup> <sup>15507.7</sup> <sup>15297.9</sup> <sup>15245.6</sup>	48 52 56 55 49 55	67 71 70 68 63 65	87 88 87 86 80 80	99 98 98 97 94 93	743 (NA) (NA) (NA) (NA) (NA) (NA)
20338	Jams, jellies, and preserves -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	<sup>15603.0</sup> <sup>15396.9</sup> <sup>15280.3</sup> <sup>15245.2</sup> <sup>15227.3</sup> <sup>15197.9</sup> <sup>15160.0</sup>	47 49 40 35 31 28 26	66 63 55 49 44 38 36	90 84 79 70 63 56 53	99+ 98 96 90 84 76 (NA)	904 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
2033A	Canned fruit juices, nectars, and concentrates <sup>16</sup> -----	1982...	<sup>151</sup> 409.9	33	49	76	96	439
2033B	Fresh fruit juices and nectars, single strength <sup>16</sup> -----	1982...	<sup>15652.2</sup>	45	56	78	92	957
20330	Canned fruits and vegetables, n.s.k.-----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>15368.7</sup> <sup>15309.2</sup> <sup>15180.5</sup> <sup>15124.3</sup> <sup>1558.5</sup> <sup>1547.4</sup>	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2034-	Dehydrated fruits, vegetables, and soups -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	<sup>1</sup> 749.2 <sup>1</sup> 200.2 625.9 450.9 334.9 276.8 185.5	41 36 31 29 35 44 50	58 52 50 46 51 64 68	81 73 74 70 74 80 85	95 92 92 91 92 96 (NA)	576 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
20341	Dried and dehydrated fruits and vegetables -----	1982... 1977... 1972... 1967... 1963...	<sup>1</sup> 324.5 898.6 466.4 344.9 284.5	48 39 32 32 39	65 56 51 50 55	89 82 79 77 77	99+ 98 97 97 95	799 (NA) (NA) (NA) (NA) (NA)
20342	Soup mixes, dried -----	1982... 1977... 1972... 1967... 1963...	332.8 224.7 126.7 76.4 44.5	76 78 75 73 84	91 88 86 83 91	99 98 97 97 99	100 100 100 100 100	2 391 (NA) (NA) (NA) (NA) (NA)
20340	Dehydrated fruits, vegetables, and soups, n.s.k.-----	1982... 1977... 1972... 1967... 1963...	91.9 76.9 32.8 29.6 5.9	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2035-	Pickles, sauces, and salad dressings-----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>153</sup> 252.7 <sup>152</sup> 242.8 <sup>151</sup> 165.1 <sup>15792.9</sup> <sup>15619.0</sup> <sup>15496.1</sup>	40 39 30 29 29 29	51 47 42 40 40 38	64 60 57 56 55 51	81 77 76 74 71 68	606 (NA) (NA) (NA) (NA) (NA) (NA)
20352	Pickles and other pickled products -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	<sup>15694.5</sup> <sup>15553.2</sup> <sup>15362.5</sup> <sup>15260.6</sup> <sup>15220.5</sup> <sup>15170.1</sup> <sup>15135.6</sup>	43 40 38 29 23 20 18	57 53 51 43 34 30 29	82 78 74 65 53 50 49	98 96 91 86 77 73 (NA)	764 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
20353	Prepared sauces, except tomato-----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>15540.0</sup> <sup>15261.6</sup> <sup>15151.3</sup> <sup>1598.5</sup> <sup>15102.0</sup> <sup>1567.6</sup>	52 49 50 47 45 35	68 65 66 63 57 47	86 85 86 82 78 66	97 98 97 95 92 83	871 (NA) (NA) (NA) (NA) (NA) (NA)
20354	Mayonnaise, salad dressings, and sandwich spreads-----	1982... 1977... 1972... 1967... 1963...	<sup>151</sup> 815.4 <sup>151</sup> 292.3 <sup>15576.0</sup> <sup>15373.9</sup> <sup>15278.6</sup>	61 60 52 55 56	68 67 62 65 68	82 79 76 78 80	96 93 92 92 93	1 626 (NA) (NA) (NA) (NA) (NA)
20350	Pickles, sauces, and salad dressing, n.s.k.-----	1982... 1977... 1972... 1967... 1963...	<sup>15202.7</sup> <sup>15135.7</sup> <sup>1575.3</sup> <sup>1559.9</sup> <sup>1518.0</sup>	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2037-	Frozen fruits and vegetables -----	1982... 1977...	<sup>155</sup> 062.0 <sup>153</sup> 047.2	28 23	40 41	60 60	83 82	294 (NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
2037-	Frozen fruits and vegetables—Con.						
	1972..	<sup>151</sup> 644.4	28	42	64	86	(NA)
20371	Frozen fruits, juices, ades, drinks, and cocktails <sup>6</sup> .....	1982.. <sup>151</sup> 860.4	40	51	73	95	790
	1977.. <sup>151</sup> 153.5	36	50	75	94	(NA)	(NA)
	1972.. <sup>157</sup> 30.0	41	54	77	93	(NA)	(NA)
	1967.. <sup>154</sup> 19.5	30	43	68	90	(NA)	(NA)
	1963.. <sup>154</sup> 36.3	28	42	65	86	(NA)	(NA)
	1958.. <sup>153</sup> 58.0	34	48	72	90	(NA)	(NA)
	1954.. <sup>152</sup> 56.5	40	54	74	(NA)	(NA)	(NA)
20372	Frozen vegetables .....	1982.. <sup>153</sup> 089.7	36	53	78	98	494
	1977.. <sup>151</sup> 797.9	34	56	79	97	(NA)	(NA)
	1972.. <sup>159</sup> 14.4	35	57	82	97	(NA)	(NA)
	1967.. <sup>155</sup> 79.9	34	53	76	95	(NA)	(NA)
	1963.. <sup>153</sup> 96.0	39	56	75	92	(NA)	(NA)
	1958.. <sup>152</sup> 31.1	45	59	76	93	(NA)	(NA)
	1954.. <sup>151</sup> 68.1	52	63	78	(NA)	(NA)	(NA)
20370	Frozen fruits and vegetables, n.s.k. ....	1982.. <sup>151</sup> 111.9	(X)	(X)	(X)	(X)	(X)
	1977.. <sup>159</sup> 5.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. (17)	(X)	(X)	(X)	(X)	(X)	(NA)
2038-	Frozen specialties .....	1982.. <sup>154</sup> 417.2	31	46	69	83	380
	1977.. <sup>152</sup> 911.9	33	49	68	85	(NA)	(NA)
	1972.. <sup>151</sup> 743.0	36	48	65	82	(NA)	(NA)
20381	Frozen pies and other frozen baked goods <sup>11</sup> .....	1982.. <sup>151</sup> 292.5	52	66	83	96	948
	1977.. <sup>157</sup> 70.3	52	72	88	99	(NA)	(NA)
	1972.. <sup>153</sup> 87.5	51	65	89	99	(NA)	(NA)
20382	Frozen dinners, meat pies, and nationality foods <sup>11</sup> .....	1982.. <sup>152</sup> 356.6	44	64	82	96	678
	1977.. <sup>151</sup> 297.7	45	58	80	97	(NA)	(NA)
	1972.. <sup>157</sup> 02.5	58	72	90	99	(NA)	(NA)
20383	Other frozen specialties <sup>11</sup> .....	1982.. <sup>156</sup> 24.3	44	57	80	99	792
	1977.. <sup>157</sup> 18.2	58	72	88	99	(NA)	(NA)
	1972.. <sup>154</sup> 92.5	35	54	81	95	(NA)	(NA)
20380	Frozen specialties, n.s.k. ....	1982.. <sup>151</sup> 143.8	(X)	(X)	(X)	(X)	(X)
	1977.. <sup>151</sup> 125.7	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. <sup>151</sup> 160.5	(X)	(X)	(X)	(X)	(X)	(NA)
2041-	Flour and other grain mill products .....	1982.. <sup>54</sup> 871.6	40	60	78	93	558
	1977.. <sup>53</sup> 678.6	33	54	76	91	(NA)	(NA)
	1972.. <sup>52</sup> 374.1	32	53	76	91	(NA)	(NA)
	1967.. <sup>52</sup> 322.5	31	45	70	88	(NA)	(NA)
	1963.. <sup>52</sup> 070.6	36	51	70	87	(NA)	(NA)
20411	Wheat flour, except flour mixes .....	1982.. 3 102.3	48	74	91	99	813
	1977.. 2 208.9	38	66	88	99	(NA)	(NA)
	1972.. 1 626.7	37	62	84	96	(NA)	(NA)
	1967.. 1 557.7	37	55	78	94	(NA)	(NA)
	1963.. 1 490.9	40	58	77	92	(NA)	(NA)
20412	Wheat mill products other than flour .....	1982.. 478.5	50	70	88	99	839
	1977.. 455.4	39	64	88	99	(NA)	(NA)
	1972.. 222.6	37	61	84	97	(NA)	(NA)
	1967.. 204.3	35	55	77	94	(NA)	(NA)
	1963.. 199.5	38	56	77	93	(NA)	(NA)
	1958.. 167.9	40	55	71	89	(NA)	(NA)
	1954.. 195.1	42	58	74	(NA)	(NA)	(NA)
20413	Corn mill products .....	1982.. 553.8	57	78	92	99	1 001
	1977.. 413.3	62	85	96	96	(NA)	(NA)
	1972.. 241.9	60	77	92	99	(NA)	(NA)
	1967.. 261.8	62	77	91	97	(NA)	(NA)
20415	Flour mixes and refrigerated doughs made in flour mills (also see code 20450) .....	1982.. <sup>53</sup> 82.4	77	88	99+	100	2 612
	1977.. <sup>52</sup> 87.2	74	89	99+	100	(NA)	(NA)
	1972.. <sup>51</sup> 43.5	79	91	99	100	(NA)	(NA)
	1967.. <sup>51</sup> 48.6	70	93	99	100	(NA)	(NA)
	1963.. <sup>51</sup> 15.1	71	86	96	99	(NA)	(NA)
20416	Other grain mill products .....	1982.. 165.6	75	91	99+	100	1 641
	1977.. 98.3	67	81	99+	100	(NA)	(NA)
	1972.. 45.6	51	77	99	100	(NA)	(NA)
	1967.. 43.4	46	69	97	100	(NA)	(NA)
20410	Flour and other grain mill products, n.s.k. ....	1982.. 188.9	(X)	(X)	(X)	(X)	(X)
	1977.. 215.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 93.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 106.7	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 26.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1958.. 25.3	(X)	(X)	(X)	(X)	(X)	(NA)
20430	Cereal breakfast foods .....	1982.. 3 111.5	81	97	99+	100	2 058
	1977.. 1 832.9	81	95	99	100	(NA)	(NA)
	1972.. 934.6	84	96	99	100	(NA)	(NA)
	1967.. 715.7	82	94	99	100	(NA)	(NA)
	1963.. 561.4	82	94	99	100	(NA)	(NA)
	1958.. 431.8	80	91	98	99	(NA)	(NA)
	1954.. 331.0	78	89	98	(NA)	(NA)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
20440	Milled rice and byproducts ----- 1982__	1 897.4	44	72	96	99+	795
	1977__	1 242.3	47	72	94	100	(NA)
	1972__	671.2	42	67	90	99+	(NA)
	1967__	548.0	45	67	88	100	(NA)
	1963__	407.1	46	68	86	100	(NA)
	1958__	281.3	44	65	82	99	(NA)
	1954__	264.8	40	59	81	(NA)	(NA)
20450	Prepared flour mixes and refrigerated doughs, not made in flour mills (also see code 20415) (1977 product class 20455) ----- 1982__	<sup>51</sup> 691.8	62	76	91	98	1 141
	1977__	<sup>51</sup> 204.3	57	75	90	98	(NA)
	1972__	<sup>56</sup> 48.4	62	79	90	97	(NA)
	1967__	<sup>54</sup> 96.3	63	80	90	96	(NA)
	1963__	<sup>54</sup> 10.9	65	79	89	95	(NA)
2046-	Wet corn milling ----- 1982__	3 105.7	73	91	99	100	1 514
	1977__	1 946.1	61	86	99	100	(NA)
	1972__	768.8	63	85	99	100	(NA)
	1967__	646.6	64	87	98	100	(NA)
	1963__	547.2	65	87	97	100	(NA)
	1958__	482.6	68	88	(NA)	(NA)	(NA)
20461	Corn sweeteners <sup>18</sup> ----- 1982__	1 610.4	84	(X)	(D)	(X)	1 930
20462	Manufactured starch <sup>18</sup> ----- 1982__	655.1	62	91	100	(X)	1 277
20463	Corn oil <sup>18</sup> ----- 1982__	234.9	83	94	99+	100	(D)
20464	Wet process corn byproducts <sup>18</sup> ----- 1982__	577.7	77	93	100	(X)	1 643
20460	Wet corn milling products, n.s.k. <sup>18</sup> ----- 1982__	27.6	(X)	(X)	(X)	(X)	(X)
2047-	Dog, cat, and other pet food <sup>19</sup> ----- 1982__	4 439.8	50	69	80	89	1 057
	1977__	3 071.0	52	67	80	89	(NA)
	1972__	1 463.9	50	67	81	90	(NA)
20473	Dog food <sup>20</sup> ----- 1982__	2 655.4	57	74	87	97	1 129
20474	Cat food <sup>20</sup> ----- 1982__	1 272.9	84	93	98	100	2 222
20475	Other pet food, including horsemeat <sup>20</sup> ----- 1982__	79.2	51	81	97	100	960
20476	Specialty feeds (except pet food) <sup>20</sup> ----- 1982__	279.7	29	42	70	91	384
20470	Dog, cat, and other pet food, n.s.k. ----- 1982__	152.5	(X)	(X)	(X)	(X)	(X)
	1977__	85.7	(X)	(X)	(X)	(X)	(NA)
2048-	Prepared feeds, n.e.c. <sup>19</sup> ----- 1982__	10 488.2	19	30	46	64	177
	1977__	8 350.2	21	30	44	59	(NA)
	1972__	4 662.8	22	30	42	57	(NA)
20481	Poultry feed, except duck and goose <sup>11</sup> ----- 1982__	3 642.1	25	42	65	86	301
	1977__	2 758.6	24	37	58	78	(NA)
20482	Dairy cattle feed, complete <sup>11</sup> ----- 1982__	1 473.9	29	41	63	85	349
	1977__	1 145.6	31	41	62	82	(NA)
20483	Dairy cattle feed supplements and concentrates <sup>11</sup> ----- 1982__	544.3	39	54	77	91	529
	1977__	308.5	40	52	73	89	(NA)
20484	Swine feed, complete <sup>11</sup> ----- 1982__	585.9	32	50	70	85	420
	1977__	575.8	35	48	67	83	(NA)
20485	Swine feed supplements and concentrates <sup>11</sup> ----- 1982__	1 113.7	43	60	83	94	675
	1977__	892.3	46	61	80	92	(NA)
20486	Beef cattle feed, complete <sup>11</sup> ----- 1982__	511.4	33	43	62	84	559
	1977__	367.1	31	40	57	80	(NA)
20487	Beef cattle feed supplements and concentrates <sup>11</sup> ----- 1982__	607.7	41	58	80	93	565
	1977__	603.8	35	50	73	90	(NA)
20488	Other poultry and livestock feed <sup>11</sup> ----- 1982__	400.6	36	47	65	82	539
	1977__	337.9	35	49	67	83	(NA)
20489	Other prepared animal feeds <sup>19</sup> ----- 1982__	361.2	19	32	53	75	194
	1977__	338.0	21	33	51	73	(NA)
	1972__	167.7	23	35	54	75	(NA)
20480	Prepared feed, n.e.c., n.s.k. <sup>19</sup> ----- 1982__	1 247.4	(X)	(X)	(X)	(X)	(X)
	1977__	1 022.6	(X)	(X)	(X)	(X)	(NA)
	1972__	<sup>21</sup> 762.6	(X)	(X)	(X)	(X)	(NA)
2051-	Bread, cake, and related products ----- 1982__	11 028.1	32	45	58	71	366
	1977__	7 965.9	32	40	53	66	(NA)
	1972__	5 160.9	27	37	48	60	(NA)
	1967__	4 320.4	25	36	45	56	(NA)
	1963__	3 829.8	22	34	43	54	(NA)
	1958__	3 555.9	21	33	42	51	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
2051-	Bread, cake, and related products—Con.						
	1954..	2 987.9	19	32	42	(NA)	(NA)
20511	Bread—white, wheat, and rye (including frozen) <sup>11</sup> -----	1982.. 4 698.1	37	53	67	82	478
	1977.. 3 500.7	36	47	61	76	(NA)	(NA)
	1972.. 2 444.5	32	43	56	68	(NA)	(NA)
20512	Rolls, bread-type, including stuffing and crumbs <sup>11</sup> -----	1982.. 2 437.7	26	42	61	78	283
	1977.. 1 679.6	27	40	54	70	(NA)	(NA)
	1972.. 896.5	28	38	51	66	(NA)	(NA)
20513	Sweet yeast goods, except frozen -----	1982.. 760.7	38	54	75	90	586
	1977.. 640.4	28	42	61	79	(NA)	(NA)
	1972.. 430.2	24	36	56	74	(NA)	(NA)
	1967.. 393.0	19	30	46	63	(NA)	(NA)
	1963.. 330.5	21	29	43	56	(NA)	(NA)
	1958.. 295.5	20	28	41	54	(NA)	(NA)
	1954.. 233.9	15	23	37	(NA)	(NA)	(NA)
20514	Soft cakes, except frozen -----	1982.. 1 231.2	50	71	86	95	1 047
	1977.. 949.9	51	67	80	92	(NA)	(NA)
	1972.. 552.4	48	60	74	88	(NA)	(NA)
	1967.. 478.5	39	57	70	84	(NA)	(NA)
	1963.. 438.0	31	50	64	76	(NA)	(NA)
	1958.. 413.3	32	48	62	75	(NA)	(NA)
	1954.. 372.4	31	45	48	(NA)	(NA)	(NA)
20515	Pies (fruit and custard), except frozen -----	1982.. 394.5	53	70	86	97	1 178
	1977.. 297.1	54	66	80	94	(NA)	(NA)
	1972.. 224.0	41	55	72	88	(NA)	(NA)
	1967.. 226.7	40	53	66	84	(NA)	(NA)
	1963.. 205.9	27	38	55	71	(NA)	(NA)
	1958.. 201.5	23	33	50	66	(NA)	(NA)
	1954.. 185.9	20	28	43	(NA)	(NA)	(NA)
20516	Pastries -----	1982.. 39.2	39	61	87	99	620
	1977.. 31.2	40	61	86	98	(NA)	(NA)
	1972.. 49.6	33	55	77	93	(NA)	(NA)
	1967.. 51.2	32	46	67	83	(NA)	(NA)
	1963.. 51.2	24	37	56	76	(NA)	(NA)
20517	Doughnuts (cake type) -----	1982.. 465.2	65	77	88	98	1 428
	1977.. 241.1	60	69	82	96	(NA)	(NA)
	1972.. 179.3	50	60	72	87	(NA)	(NA)
	1967.. 164.0	38	53	64	78	(NA)	(NA)
	1963.. 141.4	32	44	56	69	(NA)	(NA)
	1958.. 125.2	23	34	47	62	(NA)	(NA)
	1954.. 113.3	21	32	45	(NA)	(NA)	(NA)
20510	Bread, cake, and related products, n.s.k. -----	1982.. 1 001.5	(X)	(X)	(X)	(X)	(X)
	1977.. 625.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 384.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 213.6	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 166.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1958.. 259.6	(X)	(X)	(X)	(X)	(X)	(NA)
2052-	Cookies and crackers -----	1982.. 4 435.8	59	69	81	91	1 448
	1977.. 2 812.4	59	67	80	91	(NA)	(NA)
	1972.. 1 713.3	58	67	80	91	(NA)	(NA)
	1967.. 1 349.5	56	65	78	89	(NA)	(NA)
	1963.. 1 137.6	58	66	77	89	(NA)	(NA)
	1958.. 982.0	61	68	77	86	(NA)	(NA)
20521	Crackers, pretzels, biscuits, and related products -----	1982.. 1 827.8	74	82	92	99	2 147
	1977.. 1 168.9	70	80	92	99+	(NA)	(NA)
	1972.. 715.0	68	77	89	98	(NA)	(NA)
	1967.. 494.0	71	78	89	(NA)	(NA)	(NA)
	1963.. 450.2	71	81	92	98	(NA)	(NA)
	1958.. 349.8	77	84	92	99	(NA)	(NA)
20522	Cookies, wafers, and ice cream cones and cups -----	1982.. 2 480.8	54	67	83	95	1 195
	1977.. 1 578.4	55	66	82	94	(NA)	(NA)
	1972.. 976.5	55	67	81	93	(NA)	(NA)
	1967.. 832.2	51	63	78	91	(NA)	(NA)
	1963.. 679.8	52	60	75	88	(NA)	(NA)
20520	Cookies and crackers, n.s.k. -----	1982.. 127.2	(X)	(X)	(X)	(X)	(X)
	1977.. 65.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 21.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 23.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 7.6	(X)	(X)	(X)	(X)	(X)	(NA)
	1958.. 13.4	(X)	(X)	(X)	(X)	(X)	(NA)
20610	Sugar cane mill products and byproducts -----	1982.. 1 091.2	41	61	86	100	626
	1977.. 707.6	42	61	86	99+	(NA)	(NA)
	1972.. 419.6	43	60	83	99	(NA)	(NA)
	1967.. 363.5	42	62	82	99	(NA)	(NA)
	1963.. 373.5	47	65	82	100	(NA)	(NA)
20620	Refined cane sugar and byproducts -----	1982.. 2 992.3	65	92	99+	100	1 427
	1977.. 2 168.0	63	90	99+	100	(NA)	(NA)
	1972.. 1 746.4	58	83	99	100	(NA)	(NA)
	1967.. 1 336.2	59	83	100	(X)	(NA)	(NA)
	1963.. 1 255.0	62	82	100	(X)	(NA)	(NA)
	1958.. 996.2	69	87	(D)	100	(NA)	(NA)
	1954.. 859.0	(NA)	(NA)	100	(X)	(NA)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
20630	Refined beet sugar and byproducts ----- 1982..	1 506.3	67	94	100	(X)	1 382
	1977..	1 160.4	67	95	100	(X)	(NA)
	1972..	866.4	66	97	100	(X)	(NA)
	1967..	550.8	67	96	100	(X)	(NA)
	1963..	553.7	66	97	100	(X)	(NA)
	1958..	379.8	64	94	100	(X)	(NA)
	1954..	289.6	66	96	100	(X)	(NA)
2065-	Confectionery products ----- 1982..	<sup>56</sup> 225.1	40	51	65	79	577
	1977..	<sup>54</sup> 170.2	36	46	63	78	(NA)
	1972..	<sup>52</sup> 337.0	32	43	59	75	(NA)
	1967..	<sup>51</sup> 812.7	24	35	51	67	(NA)
	1963..	<sup>51</sup> 393.9	15	26	44	63	(NA)
	1958..	<sup>51</sup> 172.8	17	26	41	60	(NA)
	1954..	<sup>59</sup> 82.5	18	26	41	(NA)	(NA)
20652	Chocolate and chocolate-type confectionery products, made from purchased chocolate (also see code 20662) <sup>11</sup> ----- 1982..	<sup>52</sup> 719.6	59	71	86	96	1 521
	1977..	<sup>51</sup> 709.3	50	64	81	93	(NA)
20653	Nonchocolate-type products <sup>11</sup> ----- 1982..	1 593.7	40	54	71	89	551
	1977..	1 241.7	36	48	66	86	(NA)
20657	Nuts and seeds (salted, roasted, cooked, or blanched) <sup>22</sup> ----- 1982..	1 494.3	50	62	80	96	1 033
20659	Other confectionery-type products <sup>22</sup> ----- 1982..	76.6	81	98	100	(X)	1 869
20650	Confectionery products, n.s.k. ----- 1982..	340.9	(X)	(X)	(X)	(X)	(X)
	1977..	215.2	(X)	(X)	(X)	(X)	(NA)
	1972..	104.2	(X)	(X)	(X)	(X)	(NA)
	1967..	115.6	(X)	(X)	(X)	(X)	(NA)
	1963..	30.4	(X)	(X)	(X)	(X)	(NA)
	1958..	18.9	(X)	(X)	(X)	(X)	(NA)
2066-	Chocolate and cocoa products ----- 1982..	<sup>52</sup> 262.1	69	85	98	99+	1 784
	1977..	<sup>51</sup> 603.3	71	86	98	99+	(NA)
	1972..	<sup>57</sup> 240.7	72	86	99+	100	(NA)
	1967..	<sup>54</sup> 46.4	74	87	99	100	(NA)
	1963..	<sup>54</sup> 80.6	71	83	96	100	(NA)
	1958..	<sup>54</sup> 42.3	69	83	97	100	(NA)
20661	Chocolate coatings ----- 1982..	352.7	64	90	99+	100	1 280
	1977..	340.9	62	90	99+	100	(NA)
	1972..	167.0	54	84	99	100	(NA)
	1967..	137.8	56	84	98	100	(NA)
	1963..	139.6	45	73	96	100	(NA)
	1958..	143.6	46	71	97	100	(NA)
20662	Chocolate and chocolate-type confections, made from beans ground in the same establishment (also see code 20652) ----- 1982..	<sup>51</sup> 040.1	85	(D)	(D)	(X)	2 997
	1977..	<sup>55</sup> 65.4	82	98	100	(X)	(NA)
	1972..	<sup>52</sup> 89.5	(D)	98	100	(X)	(NA)
	1967..	<sup>52</sup> 05.1	(D)	99	100	(X)	(NA)
	1963..	<sup>51</sup> 79.9	(D)	98	100	(X)	(NA)
	1958..	<sup>51</sup> 41.8	88	96	100	(X)	(NA)
20668	Other chocolate and cocoa products, made from beans or nibs ground in same establishment (also see code 20998) ----- 1982..	<sup>58</sup> 23.2	82	96	100	(X)	2 349
	1977..	<sup>56</sup> 80.6	85	95	100	(X)	(NA)
	1972..	<sup>52</sup> 62.5	83	93	100	(X)	(NA)
	1967..	<sup>51</sup> 92.8	89	97	100	100	(NA)
	1963..	<sup>51</sup> 61.2	79	88	98	100	(NA)
	1958..	<sup>51</sup> 56.8	81	93	100	(X)	(NA)
20660	Chocolate and cocoa products, n.s.k. ----- 1982..	46.0	(X)	(X)	(X)	(X)	(X)
	1977..	16.4	(X)	(X)	(X)	(X)	(NA)
	1972..	5.0	(X)	(X)	(X)	(X)	(NA)
	1967..	10.7	(X)	(X)	(X)	(X)	(NA)
20670	Chewing gum and chewing gum base ----- 1982..	817.2	87	99	100	(X)	(D)
	1977..	649.3	93	97	(D)	100	(NA)
	1972..	384.8	84	97	99+	100	(NA)
	1967..	271.9	81	94	99+	100	(NA)
	1963..	206.8	86	95	100	(X)	(NA)
	1958..	175.1	83	92	98	100	(NA)
	1954..	153.5	84	93	99	(NA)	(NA)
2074-	Cottonseed oil mill products (1967 product group 2091-) ----- 1982..	812.2	50	68	89	100	820
	1977..	763.1	42	59	81	99	(NA)
	1972..	410.8	42	55	74	96	(NA)
	1967..	365.7	44	60	76	94	(NA)
	1963..	490.7	40	54	68	88	(NA)
	1958..	377.3	44	56	72	91	(NA)
	1954..	559.6	44	54	70	(NA)	(NA)
20741	Cottonseed oil, crude (1967 product class 20911) ----- 1982..	150.2	59	81	98	100	1 128
	1977..	146.6	41	59	85	100	(NA)
	1972..	125.9	43	57	78	99	(NA)
	1967..	114.8	43	58	77	97	(NA)
	1963..	174.1	41	53	69	90	(NA)
	1958..	162.7	43	53	72	91	(NA)
20742	Cottonseed oil, once-refined (1967 product class 20912) ----- 1982..	219.7	60	81	100	(X)	1 183
	1977..	236.5	54	77	99+	100	(NA)
	1972..	73.4	62	88	100	(X)	(NA)
	1967..	56.2	75	96	100	(X)	(NA)
	1963..	65.7	68	85	100	(X)	(NA)
	1958..	47.7	71	89	99	100	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
2074-	Cottonseed oil mill products (1967 product group 2091)— Con.						
20743	Cotton linters (1967 product class 20913) ----- 1982..	70.0	47	71	93	100	787
	1977..	43.4	44	63	84	100	(NA)
	1972..	29.2	40	57	80	99	(NA)
	1967..	38.3	41	62	80	96	(NA)
	1963..	37.7	37	54	71	90	(NA)
	1958..	28.7	40	57	75	92	(NA)
20744	Cottonseed cake and meal and other byproducts (1967 product class 20914)----- 1982..	360.1	52	72	91	100	835
	1977..	323.9	42	59	83	100	(NA)
	1972..	175.3	39	58	78	98	(NA)
	1967..	148.0	40	60	77	95	(NA)
	1963..	208.1	37	53	68	89	(NA)
	1958..	131.3	42	55	71	89	(NA)
20740	Cottonseed oil mills, n.s.k. (1967 product class 20910) ----- 1982..	12.1	(X)	(X)	(X)	(X)	(X)
	1977..	12.6	(X)	(X)	(X)	(X)	(NA)
	1972..	7.0	(X)	(X)	(X)	(X)	(NA)
	1967..	8.4	(X)	(X)	(X)	(X)	(NA)
	1963..	5.1	(X)	(X)	(X)	(X)	(NA)
	1958..	6.9	(X)	(X)	(X)	(X)	(NA)
2075-	Soybean oil mill products (1967 product group 2092-) ----- 1982..	7 257.4	56	79	97	100	1 038
	1977..	6 116.5	50	71	93	99+	(NA)
	1972..	2 652.2	52	68	90	99	(NA)
	1967..	1 740.8	55	73	90	99	(NA)
	1963..	1 293.6	48	67	86	99	(NA)
	1958..	919.7	37	61	84	97	(NA)
	1954..	762.9	37	62	87	(NA)	(NA)
20751	Soybean oil (1967 product class 20921) ----- 1982..	2 375.4	59	78	97	100	1 147
	1977..	2 070.1	53	73	(D)	100	(NA)
	1972..	802.4	51	70	91	99+	(NA)
	1967..	594.3	55	73	90	99+	(NA)
	1963..	458.9	46	67	86	99	(NA)
	1958..	425.9	39	61	84	98	(NA)
20752	Soybean cake, meal, and other byproducts (1967 product class 20922) ----- 1982..	4 836.2	56	80	99	100	1 029
	1977..	4 016.7	49	70	94	100	(NA)
	1972..	1 844.0	53	70	92	99+	(NA)
	1967..	1 143.4	56	76	92	99+	(NA)
	1963..	831.4	49	69	87	99	(NA)
	1958..	487.4	37	61	85	98	(NA)
20750	Soybean oil mills, n.s.k. (1967 product class 20920) ----- 1982..	45.7	(X)	(X)	(X)	(X)	(X)
	1977..	29.7	(X)	(X)	(X)	(X)	(NA)
	1972..	5.8	(X)	(X)	(X)	(X)	(NA)
	1967..	3.1	(X)	(X)	(X)	(X)	(NA)
	1963..	3.4	(X)	(X)	(X)	(X)	(NA)
	1958..	6.4	(X)	(X)	(X)	(X)	(NA)
2076-	Vegetable oil mill products, n.e.c. (1967 product class 2093-) ----- 1982..	544.3	49	76	94	100	853
	1977..	401.0	33	53	84	99	(NA)
	1972..	272.1	45	70	94	100	(NA)
	1967..	205.9	46	67	95	99+	(NA)
	1963..	196.8	54	79	93	100	(NA)
	1958..	189.3	61	88	98	99	(NA)
20761	Linseed oil (1967 product class 20931) ----- 1982..	84.1	(D)	(D)	(X)	(X)	2 759
	1977..	72.5	98	(D)	100	(X)	(NA)
	1972..	44.4	98	100	(X)	(X)	(NA)
	1967..	48.2	86	99	100	(X)	(NA)
	1963..	50.2	84	99	100	(X)	(NA)
	1958..	63.2	77	99	100	(X)	(NA)
20762	Vegetable oils (1967 product class 20932) ----- 1982..	372.1	56	73	95	100	933
	1977..	210.8	40	59	89	100	(NA)
	1972..	157.4	53	70	94	100	(NA)
	1967..	113.4	52	74	97	100	(NA)
	1963..	105.2	66	83	95	100	(NA)
	1958..	82.7	75	88	98	100	(NA)
20763	Other vegetable oil mill products (1967 product class 20933) ----- 1982..	84.8	72	90	100	(X)	1 457
	1977..	86.9	48	67	94	100	(NA)
	1972..	67.9	61	82	99	100	(NA)
	1967..	41.8	53	78	98	100	(NA)
	1963..	39.5	59	85	98	100	(NA)
	1958..	43.3	70	92	99	100	(NA)
20760	Vegetable oil mills, n.e.c., n.s.k. (1967 product class 20930) ----- 1982..	3.3	(X)	(X)	(X)	(X)	(X)
	1977..	30.8	(X)	(X)	(X)	(X)	(NA)
	1972..	2.4	(X)	(X)	(X)	(X)	(NA)
	1967..	2.5	(X)	(X)	(X)	(X)	(NA)
	1963..	2.0	(X)	(X)	(X)	(X)	(NA)
2077-	Animal and marine fats and oils (1967 product class 2094-) --- 1982..	2 337.1	24	35	53	72	236
	1977..	2 102.2	19	29	46	64	(NA)
	1972..	977.1	17	26	41	60	(NA)
	1967..	709.4	18	26	41	57	(NA)
	1963..	642.9	18	27	40	56	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
2077-	Animal and marine fats and oils (1967 product class 2094)- —Con.						
	1958..	2 <sup>3</sup> 534.3	19	28	(NA)	(NA)	(NA)
20771	Grease and inedible tallow (1967 product class 20941) .....	1982.. 938.0	31	44	62	82	388
		1977.. 989.4	25	36	57	76	(NA)
		1972.. 419.4	22	33	51	72	(NA)
		1967.. 302.6	23	33	49	65	(NA)
		1963.. 264.2	26	34	48	64	(NA)
		1958.. 246.7	23	34	47	61	(NA)
		1954.. 182.6	25	36	49	(NA)	(NA)
20772	Feed and fertilizer byproducts (1967 product class 20942) .....	1982.. 1 093.5	27	42	61	79	300
		1977.. 753.9	20	33	50	70	(NA)
		1972.. 389.2	19	31	48	68	(NA)
		1967.. 277.8	20	31	47	66	(NA)
		1963.. 246.7	20	29	45	64	(NA)
		1958.. 174.3	22	30	44	60	(NA)
		1954.. 169.7	29	37	52	(NA)	(NA)
20773	Animal and marine oil mill products, including foots (1967 product class 20943) .....	1982.. 205.4	53	73	92	99 +	976
		1977.. 250.4	44	56	81	98	(NA)
		1972.. 121.8	42	54	75	95	(NA)
		1967.. 96.3	41	54	74	94	(NA)
		1963.. 111.3	36	50	74	94	(NA)
		1958.. 104.3	37	50	69	91	(NA)
20770	Animal and marine fats and oils, n.s.k. (1967 product class 20940) .....	1982.. 100.2	(X)	(X)	(X)	(X)	(X)
		1977.. 108.4	(X)	(X)	(X)	(X)	(NA)
		1972.. 46.7	(X)	(X)	(X)	(X)	(NA)
		1967.. 32.7	(X)	(X)	(X)	(X)	(NA)
		1963.. 20.7	(X)	(X)	(X)	(X)	(NA)
		1958.. 8.9	(X)	(X)	(X)	(X)	(NA)
2079-	Shortening and cooking oils (1967 product class 2096-) .....	1982.. 5 340.5	40	58	82	98	591
		1977.. 4 272.2	41	58	85	98	(NA)
		1972.. 2 232.6	40	61	87	99	(NA)
		1967.. 1 690.4	42	64	88	99	(NA)
		1963.. 1 230.7	41	63	89	99	(NA)
		1958.. 1 191.3	43	65	89	99	(NA)
20791	Shortening and cooking oils (1967 product class 20961) .....	1982.. 4 028.6	47	64	86	99	721
		1977.. 3 166.3	47	63	87	99	(NA)
		1972.. 1 643.6	50	70	89	99	(NA)
		1967.. 1 233.9	53	72	92	99	(NA)
		1963.. 907.4	51	74	92	98	(NA)
		1958.. 895.4	50	73	94	99	(NA)
		1954.. 888.3	55	79	95	(NA)	(NA)
20792	Margarine (1967 product class 20962) .....	1982.. 1 225.1	55	76	99	100	988
		1977.. 1 070.4	60	84	99 +	100	(NA)
		1972.. 586.3	54	81	99	100	(NA)
		1967.. 456.5	47	72	97	100	(NA)
		1963.. 323.2	50	73	97	100	(NA)
		1958.. 295.9	46	70	94	100	(NA)
		1954.. 278.5	39	64	93	(NA)	(NA)
20790	Shortening and cooking oils, n.s.k. ....	1982.. 86.8	(X)	(X)	(X)	(X)	(X)
		1977.. 35.6	(X)	(X)	(X)	(X)	(NA)
		1972.. 2.7	(X)	(X)	(X)	(X)	(NA)
2082-	Malt beverages <sup>24</sup> .....	1982.. 11 105.6	78	94	99	100	2 106
		1977.. 6 612.9	65	83	98	99 +	(NA)
		1972.. 4 038.6	52	70	91	99	(NA)
		1967.. 2 900.3	40	59	87	98	(NA)
		1963.. 2 282.0	34	52	79	94	(NA)
		1958.. 1 972.1	29	45	69	88	(NA)
		1954.. 1 854.8	27	41	60	(NA)	(NA)
20821	Canned beer and ale case goods <sup>24</sup> .....	1982.. 5 984.9	80	97	99 +	100	2 046
		1977.. 3 548.9	66	89	99	100	(NA)
		1972.. 2 206.3	59	77	96	100	(NA)
20822	Bottled beer and ale case goods <sup>24</sup> .....	1982.. 3 964.6	81	92	99	100	2 600
		1977.. 2 263.1	68	83	98	100	(NA)
		1972.. 1 416.6	46	65	89	99	(NA)
20823	Beer and ale in barrels and kegs <sup>24</sup> .....	1982.. 686.7	74	92	99 +	100	2 233
		1977.. 398.1	58	78	98	100	(NA)
		1972.. 264.1	51	67	91	100	(NA)
20824	All other malt beverages and brewing products <sup>24</sup> .....	1982.. 441.8	86	98	100	(X)	2 416
		1977.. 379.7	70	91	99 +	100	(NA)
		1972.. 116.5	73	86	98	100	(NA)
20820	Malt beverages, n.s.k. <sup>24</sup> .....	1982.. 27.6	(X)	(X)	(X)	(X)	(X)
		1977.. 23.1	(X)	(X)	(X)	(X)	(NA)
		1972.. 35.1	(X)	(X)	(X)	(X)	(NA)
20830	Malt and malt byproducts .....	1982.. 654.7	61	82	99	100	1 175
		1977.. 488.9	60	81	98	100	(NA)
		1972.. 212.9	49	76	98	100	(NA)
		1967.. 200.0	42	67	95	100	(NA)
		1963.. 185.1	37	62	94	100	(NA)
		1958.. 184.9	50	69	95	100	(NA)
		1954.. 193.1	47	68	93	(NA)	(NA)

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
20840	Wines, brandy, and brandy spirits ----- 1982..	<sup>252</sup> 719.5	52	68	84	92	1 008
	1977..	<sup>251</sup> 357.7	52	69	85	95	(NA)
	1972..	<sup>258</sup> 51.0	52	66	84	94	(NA)
	1967..	<sup>254</sup> 14.9	48	62	78	91	(NA)
	1963..	<sup>253</sup> 52.6	50	63	76	90	(NA)
2085-	Distilled liquor, except brandy ----- 1982..	<sup>152</sup> 809.3	46	65	88	99+	701
	1977..	<sup>151</sup> 955.0	51	69	89	99+	(NA)
	1972..	<sup>151</sup> 557.2	50	72	90	99	(NA)
	1967..	<sup>151</sup> 246.1	52	70	87	99	(NA)
	1963..	<sup>159</sup> 59.9	56	73	92	99	(NA)
	1958..	<sup>158</sup> 09.9	60	77	94	98	(NA)
	1954..	<sup>156</sup> 84.3	63	80	93	(NA)	(NA)
20851	Distilled liquor, except brandy ----- 1982..	<sup>153</sup> 45.4	60	82	99+	100	1 155
	1977..	<sup>152</sup> 05.7	54	81	99	100	(NA)
	1972..	<sup>151</sup> 53.7	49	76	98	100	(NA)
	1967..	<sup>152</sup> 02.3	50	74	96	100	(NA)
	1963..	<sup>151</sup> 63.0	51	76	97	100	(NA)
	1958..	<sup>151</sup> 44.9	55	71	95	100	(NA)
20853	Bottled liquors, except brandy ----- 1982..	<sup>152</sup> 411.3	49	70	91	100	774
	1977..	<sup>151</sup> 703.3	54	72	94	100	(NA)
	1972..	<sup>151</sup> 396.3	51	73	92	99+	(NA)
	1967..	<sup>151</sup> 043.8	53	71	89	99+	(NA)
	1963..	<sup>157</sup> 96.6	58	75	93	100	(NA)
	1958..	<sup>156</sup> 64.1	61	80	96	99	(NA)
	1954..	<sup>155</sup> 40.2	67	82	95	(NA)	(NA)
20850	Distilled liquor, except brandy, n.s.k. ----- 1982..	<sup>155</sup> 2.6	(X)	(X)	(X)	(X)	(X)
	1977..	<sup>154</sup> 6.0	(X)	(X)	(X)	(X)	(NA)
	1972..	<sup>157</sup> 2	(X)	(X)	(X)	(X)	(NA)
	1967..	—	(X)	(X)	(X)	(X)	(NA)
	1963..	<sup>15</sup> 4	(X)	(X)	(X)	(X)	(NA)
	1958..	<sup>15</sup> 9	(X)	(X)	(X)	(X)	(NA)
2086-	Bottled and canned soft drinks <sup>26</sup> ----- 1982..	14 891.9	15	24	40	57	120
	1977..	8 503.6	14	21	26	51	(NA)
	1972..	4 800.5	14	20	32	45	(NA)
	1967..	2 996.8	13	19	27	38	(NA)
	1963..	2 136.2	11	16	23	33	(NA)
	1958..	1 451.3	11	15	22	31	(NA)
20861	Bottled and canned soft drinks <sup>26</sup> ----- 1982..	11 089.1	19	30	48	67	180
20862	Fruit drinks, cocktails, and ades, with some real juice <sup>26</sup> ----- 1982..	908.4	49	66	80	90	805
20860	Bottled and canned soft drinks, n.s.k. <sup>26</sup> ----- 1982..	2 894.3	(X)	(X)	(X)	(X)	(X)
2087-	Flavoring extracts and syrups, n.e.c. ----- 1982..	4 455.8	61	67	77	86	1 428
	1977..	2 620.7	61	68	75	84	(NA)
	1972..	1 455.7	62	70	76	84	(NA)
	1967..	1 037.9	63	70	77	85	(NA)
	1963..	790.3	55	63	72	80	(NA)
	1958..	523.0	(NA)	(NA)	(NA)	(NA)	(NA)
	1954..	464.2	48	56	69	(NA)	(NA)
20871	Flavoring extracts, emulsions, and other liquid flavors ----- 1982..	346.5	30	47	71	95	407
	1977..	226.4	21	38	67	92	(NA)
	1972..	119.0	23	34	56	83	(NA)
	1967..	95.0	18	28	49	78	(NA)
	1963..	99.3	27	36	52	72	(NA)
	1958..	71.7	28	38	55	76	(NA)
	1954..	65.2	35	43	59	(NA)	(NA)
20872	Liquid beverage bases, not for use by soft drink bottlers ----- 1982..	177.9	62	82	95	100	1 226
	1977..	213.0	78	91	99	100	(NA)
	1972..	97.9	65	79	93	99	(NA)
	1967..	129.9	74	87	96	99	(NA)
	1963..	76.1	73	85	93	99	(NA)
	1958..	59.2	63	78	91	99	(NA)
	1954..	38.3	83	89	95	(NA)	(NA)
20873	Liquid beverage bases for use by soft drink bottlers ----- 1982..	1 850.5	90	95	99	100	(D)
	1977..	919.6	86	91	96	99	(NA)
	1972..	637.1	89	94	98	99+	(NA)
	1967..	353.0	(D)	97	99	99+	(NA)
	1963..	298.7	(D)	91	95	98	(NA)
	1958..	217.4	89	93	96	98	(NA)
	1954..	194.2	89	95	97	(NA)	(NA)
20874	Other flavoring agents, except chocolate syrups ----- 1982..	1 758.3	(D)	77	86	96	2 125
	1977..	1 062.7	76	81	88	96	(NA)
	1972..	529.9	68	74	82	92	(NA)
	1967..	410.6	(D)	72	81	92	(NA)
	1963..	299.1	51	61	73	87	(NA)
	1958..	162.8	(NA)	(NA)	(NA)	(NA)	(NA)
	1954..	159.5	38	47	62	(NA)	(NA)
20870	Flavoring extracts and syrups, n.e.c., n.s.k. ----- 1982..	322.5	(X)	(X)	(X)	(X)	(X)
	1977..	199.0	(X)	(X)	(X)	(X)	(NA)
	1972..	71.8	(X)	(X)	(X)	(X)	(NA)
	1967..	49.4	(X)	(X)	(X)	(X)	(NA)
	1963..	17.1	(X)	(X)	(X)	(X)	(NA)
	1958..	12.0	(X)	(X)	(X)	(X)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
20910	Canned and cured seafood, including soup (except frozen) (1967 product class 20310) -----	1982... 1 267.1 1977... 1 025.5 1972... 585.0 1967... 421.1 1963... 384.5 1958... 367.0	44 37 38 34 33 (NA)	54 53 56 52 47 (NA)	71 71 71 68 62 (NA)	88 86 85 82 78 (NA)	582 (NA) (NA) (NA) (NA) (NA) (NA)
2092-	Fresh or frozen packaged fish (1967 product class 2036-) <sup>27</sup> ---	1982... 3 714.0 1977... 2 459.2 1972... 1 000.2 1967... 529.7 1963... 362.8 1958... 274.1 1954... 158.0	13 15 21 24 23 18 23	23 24 32 35 34 28 36	39 41 52 53 49 45 53	59 58 72 71 65 66 (NA)	106 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
20922	Prepared fresh fish and seafood (1967 product class 20362) <sup>27</sup> -----	1982... 578.3 1977... 460.5 1972... 135.2 1967... 66.2 1963... 76.6 1958... 58.4 1954... 53.6	17 10 28 23 14 16 20	27 16 39 35 21 26 31	47 29 59 58 37 42 50	69 51 80 83 58 63 (NA)	153 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
20923	Frozen fish, excluding shellfish <sup>11 27</sup> -----	1982... 1 033.9 1977... 744.4 1972... 299.0	29 36 42	45 52 64	71 76 87	91 92 99	353 (NA) (NA)
20924	Frozen shellfish <sup>11 27</sup> -----	1982... 1 397.5 1977... 887.6 1972... 414.9	23 27 32	34 42 48	57 65 70	82 85 92	248 (NA) (NA)
20920	Fresh or frozen packaged fish, n.s.k. (1967 product class 20360) <sup>27</sup> -----	1982... 704.3 1977... 366.8 1972... 151.1 1967... 79.2 1963... 19.2 1958... 12.5	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2095-	Roasted coffee <sup>28</sup> -----	1982... 5 122.7 1977... 5 217.8 1972... 2 163.3 1967... 1 793.9 1963... 1 602.7 1958... 1 768.2 1954... 1 886.7	66 62 64 57 54 46 45	77 74 79 74 70 59 59	91 90 91 88 84 76 75	98 97 97 96 93 89 (NA)	1 575 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
20951	Roasted coffee, whole bean or ground -----	1982... 3 773.3 1977... 3 674.5 1972... 1 517.7 1967... 1 375.3 1963... 1 206.4	62 57 60 56 51	73 71 75 73 66	90 90 91 88 81	98 99 98 96 92	1 407 (NA) (NA) (NA) (NA) (NA)
20952	Concentrated coffee -----	1982... 1 250.2 1977... 1 387.8 1972... 599.2 1967... 365.6 1963... 396.3	95 (D) (D) 85 81	98 98 97 94 91	100 99+ 99+ 99+ 98	(X) 100 100 100 100	(D) (NA) (NA) (NA) (NA)
20950	Roasted coffee, n.s.k. <sup>28</sup> -----	1982... 99.1 1977... 155.5 1972... 46.4 1967... 53.0	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
20970	Manufactured ice (can, block, cube, crushed, etc.) -----	1982... 227.4 1977... 140.6 1972... 105.7 1967... 85.8 1963... 94.8 1958... 115.2 1954... 133.0	17 22 29 32 32 32 26	26 36 42 41 40 40 33	40 47 52 50 48 49 41	55 60 61 61 58 59 (NA)	123 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
2098-	Macaroni and spaghetti <sup>29</sup> -----	1982... 1 192.8 1977... 751.7 1972... 353.8 1967... 248.3 1963... 215.9 1958... 165.3 1954... 151.1	37 32 34 31 28 25 25	60 51 50 49 46 41 37	83 76 74 73 69 63 57	94 94 93 93 90 86 (NA)	546 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
20981	Macaroni, spaghetti, and egg noodle products, except canned (not packaged with other ingredients) <sup>29</sup> -----	1982... 801.7	44	65	87	98	648
20982	Macaroni, spaghetti, and egg noodle products, except canned (packaged with other ingredients) <sup>29</sup> -----	1982... 342.1	77	91	99	100	2 082
20980	Macaroni, spaghetti, and noodles, n.s.k. <sup>29</sup> -----	1982... 49.0	(X)	(X)	(X)	(X)	(X)
2099-	Food preparations, n.e.c. -----	1982... 11 384.7 1977... 6 616.7 1972... 3 762.1 1967... 2 501.0 1963... 1 962.0	29 26 26 23 26	39 35 36 34 35	50 48 50 50 48	63 61 65 64 63	337 (NA) (NA) (NA) (NA) (NA)

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
20	FOOD AND KINDRED PRODUCTS—Con.						
2099-	Food preparations, n.e.c.—Con.	1958.. 1 467.2	( <sup>28</sup> )	( <sup>28</sup> )	( <sup>28</sup> )	( <sup>28</sup> )	(NA)
20991	Desserts (ready-to-mix) -----	1982.. 401.6 1977.. 412.9 1972.. 267.2 1967.. 218.2 1963.. 191.6 1958.. 138.8 1954.. 123.1	(D) 81 (D) (D) 86 81 80	86 87 86 89 92 88 89	96 97 96 96 97 95 95	99+ 99+ 99+ 99+ 100 99 (NA)	(D) (NA) (NA) (NA) (NA) (NA) (NA)
20992	Chips (potato, corn, etc.) -----	1982.. 3 321.7 1977.. 1 797.4 1972.. 1 042.1 1967.. 648.0 1963.. 466.0 1958.. 294.3	(D) 52 49 41 41 41 35	70 61 61 55 51 46	81 76 76 72 69 61	93 90 89 87 84 77	2 669 (NA) (NA) (NA) (NA) (NA) (NA)
20993	Sweetening syrups and molasses -----	1982.. 360.9 1977.. 296.8 1972.. 167.3 1967.. 138.8 1963.. 136.5 1958.. 95.6 1954.. 78.2	58 52 53 54 63 (NA) 65	71 69 71 68 76 (NA) 77	87 86 86 89 91 (NA) 91	99 98 98 98 98 (NA) (NA)	986 (NA) (NA) (NA) (NA) (NA) (NA)
20994	Baking powder and yeast -----	1982.. 273.2 1977.. 170.2 1972.. 82.6 1967.. 79.0 1963.. 80.8 1958.. 83.0	81 78 89 81 86 78	91 89 95 93 91 87	99 99 99 99 98 94	100 100 100 100 100 99	2 267 (NA) (NA) (NA) (NA) (NA) (NA)
20995	Tea in consumer packages (bags, powdered, etc.) <sup>11</sup> -----	1982.. 912.6 1977.. 616.8 1972.. 359.8	86 79 79	92 88 92	97 97 98	99+ 99+ 99+	(D) (NA) (NA)
20996	Vinegar and cider (distilled or fermented) -----	1982.. 187.8 1977.. 122.8 1972.. 80.6 1967.. 56.7 1963.. 53.9 1958.. 44.2 1954.. 41.5	58 54 48 53 49 41 46	75 71 66 67 60 53 57	92 88 86 84 77 71 72	100 99 99 97 91 88 (NA)	1 009 (NA) (NA) (NA) (NA) (NA) (NA)
20998	Chocolate and cocoa products, except confectionery, made from purchased chocolate or cocoa (also see code 20668) -----	1982.. <sup>5</sup> 157.6 1977.. <sup>5</sup> 207.5 1972.. <sup>5</sup> 55.9 1967.. <sup>5</sup> 52.2 1963.. <sup>5</sup> 51.1 1958.. <sup>5</sup> 50.1	42 54 39 39 36 44	65 70 54 59 54 60	87 87 78 78 78 81	99+ 99 96 95 96 93	648 (NA) (NA) (NA) (NA) (NA)
2099A	Dry preparations <sup>30</sup> -----	1982.. 693.5	46	64	87	98	749
2099B	Perishable prepared foods sold in bulk or packages, not frozen <sup>30</sup> ---	1982.. 909.5	18	28	42	62	140
2099C	Other food preparations, n.e.c. <sup>30</sup> -----	1982.. 2 563.3	27	41	61	81	300
20990	Food preparation, n.e.c., n.s.k. <sup>30</sup> -----	1982.. 1 603.0 1977.. 832.5 1972.. 347.7 1967.. 234.8 1963.. 98.9 1958.. 76.9	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
21	TOBACCO PRODUCTS						
21110	Cigarettes -----	1982.. <sup>15</sup> 11 433.5 1977.. <sup>15</sup> 6 098.2 1972.. <sup>15</sup> 3 589.4 1967.. <sup>15</sup> 2 942.1 1963.. <sup>15</sup> 2 568.2 1958.. <sup>15</sup> 2 137.0 1954.. <sup>15</sup> 1 623.9	90 88 84 (D) (D) 80 82	(D) (D) (D) 100 100 99 99	(D) 100 100 (X) (X) 100 100	(X) (X) (X) (X) (X) (X) (X)	2 609 (NA) (NA) (NA) (NA) (NA) (NA)
21210	Cigars -----	1982.. <sup>15</sup> 290.0 1977.. <sup>15</sup> 256.2 1972.. <sup>15</sup> 357.3 1967.. <sup>15</sup> 362.1 1963.. <sup>15</sup> 353.2 1958.. <sup>15</sup> 351.4 1954.. <sup>15</sup> 333.3	58 54 55 58 59 54 45	78 75 77 82 81 75 64	96 94 94 95 92 86 81	99+ 99 99 99 99 96 (NA)	998 (NA) (NA) (NA) (NA) (NA) (NA)
21310	Chewing and smoking tobacco and snuff -----	1982.. <sup>15</sup> 731.1 1977.. <sup>15</sup> 401.4 1972.. <sup>15</sup> 257.5 1967.. <sup>15</sup> 193.8 1963.. <sup>15</sup> 217.9 1958.. <sup>15</sup> 192.8 1954.. <sup>15</sup> 173.7	75 65 60 50 53 53 56	94 91 87 77 78 78 80	99+ 99+ 99+ 98 98 98 99	100 100 100 100 100 99 (NA)	1 839 (NA) (NA) (NA) (NA) (NA) (NA)
2141-	Tobacco stemming and redrying -----	1982.. <sup>15</sup> 2 946.0 1977.. <sup>15</sup> 1 769.1 1972.. <sup>15</sup> 1 335.9 1967.. <sup>15</sup> 1 111.9 1963.. <sup>15</sup> 1 129.8	68 66 66 67 72	91 66 86 89 92	99+ 100 98 98 98	100 100 100 100 100	1 464 (NA) (NA) (NA) (NA)

See footnotes at end of table.

Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
21	TOBACCO PRODUCTS—Con.							
2141-	Tobacco stemming and redrying—Con.							
	1958--	<sup>15</sup> 976.2	75	91	96	100	(NA)	
	1954--	<sup>15</sup> 1 018.6	81	91	97	(NA)	(NA)	
21411	Unstemmed leaf tobacco redried before packing -----	1982--	<sup>15</sup> 98.4	76	(D)	(D)	(X)	1 775
		1977--	<sup>15</sup> 170.7	67	92	100	100	(NA)
		1972--	<sup>15</sup> 124.0	60	83	99	100	(NA)
		1967--	<sup>15</sup> 115.9	65	81	99	100	(NA)
		1963--	<sup>15</sup> 165.4	77	88	99	100	(NA)
		1958--	<sup>15</sup> 223.0	72	82	95	100	(NA)
		1954--	<sup>15</sup> 350.4	82	87	96	(NA)	(NA)
21412	Tobacco stemmed -----	1982--	<sup>15</sup> 2 733.0	71	93	100	(X)	1 610
		1977--	<sup>15</sup> 1 531.7	72	90	99+	100	(NA)
		1972--	<sup>15</sup> 1 194.4	72	89	99	100	(NA)
		1967--	<sup>15</sup> 974.3	76	94	99	100	(NA)
		1963--	<sup>15</sup> 964.3	82	95	99	100	(NA)
		1958--	<sup>15</sup> 753.2	86	97	99	100	(NA)
		1954--	<sup>15</sup> 668.1	89	97	99	(NA)	(NA)
21413	Reconstituted tobacco <sup>31</sup> -----	1982--	<sup>15</sup> 111.4	90	100	(X)	(X)	(X)
21410	Reconstituted, stemmed, and redried tobacco, n.s.k. <sup>31</sup> -----	1982--	<sup>15</sup> 3.2	(X)	(X)	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS							
2211-	Cotton broad woven fabrics -----	1982--	<sup>25</sup> 3 635.0	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
		1977--	<sup>25</sup> 4 197.8	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
		1972--	<sup>25</sup> 2 596.6	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
		1967--	<sup>25</sup> 3 026.6	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
		1963--	<sup>25</sup> 3 396.8	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
		1958--	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
22111	Cotton duck and allied fabrics -----	1982--	88.2	84	94	100	(X)	(D)
		1977--	205.3	60	80	99	100	(NA)
		1972--	126.7	58	72	96	100	(NA)
		1967--	202.2	49	64	87	100	(NA)
		1963--	124.1	46	61	86	100	(NA)
		1958--	111.6	44	56	82	99	(NA)
		1954--	128.1	44	59	81	(NA)	(NA)
22112	Cotton sheeting and allied fabrics -----	1982--	290.0	47	68	97	100	878
		1977--	571.1	46	66	92	100	(NA)
		1972--	531.6	28	46	77	100	(NA)
		1967--	655.7	26	41	68	96	(NA)
		1963--	619.4	27	44	72	95	(NA)
		1958--	526.3	24	42	68	92	(NA)
		1954--	545.6	24	43	63	(NA)	(NA)
22113	Cotton print cloth yarn fabrics -----	1982--	296.2	63	91	100	(X)	1 310
		1977--	344.7	64	88	100	(X)	(NA)
		1972--	299.3	47	73	99	100	(NA)
		1967--	376.7	38	64	95	100	(NA)
		1963--	419.0	37	60	92	100	(NA)
		1958--	440.7	34	54	82	99	(NA)
		1954--	515.6	28	45	69	(NA)	(NA)
22114	Cotton colored yarn fabrics, toweling and dishcloth fabrics, and napped cotton fabrics, including blanketing -----	1982--	926.6	56	81	99+	100	1 093
		1977--	758.7	58	78	99	100	(NA)
		1972--	274.5	52	79	97	100	(NA)
		1967--	169.9	51	71	94	100	(NA)
		1963--	207.2	57	76	98	99	(NA)
		1958--	248.7	52	75	93	99	(NA)
22115	Fine cotton goods (gray goods) -----	1982--	79.6	83	(D)	(D)	(X)	(D)
		1977--	99.1	78	98	100	(X)	(NA)
		1972--	73.1	63	84	99+	100	(NA)
		1967--	330.1	51	71	94	100	(NA)
		1963--	474.3	43	64	90	99	(NA)
		1958--	384.8	40	59	84	99	(NA)
		1954--	318.9	40	57	80	(NA)	(NA)
22116	Other broad woven cotton fabrics and specialties -----	1982--	385.6	58	79	97	100	1 118
		1977--	636.2	42	67	94	100	(NA)
		1972--	329.7	50	72	94	100	(NA)
		1967--	243.5	30	51	80	99	(NA)
		1963--	181.0	35	50	74	95	(NA)
		1958--	202.9	24	41	66	91	(NA)
		1954--	247.4	19	30	53	(NA)	(NA)
22117	Finished cotton broad woven fabrics, finished in weaving mills (also see code 22617) -----	1982--	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1977--	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1972--	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1967--	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1963--	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1958--	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
22	TEXTILE MILL PRODUCTS—Con.						
2211- 22119	Cotton broad woven fabrics—Con. Cotton towels and washcloths (made in weaving mills) (also see code 23923) -----	1982__ (5) 1977__ (5) 1972__ (5) 1967__ (5) 1963__ (5) 1958__ (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(NA) (NA) (NA) (NA) (NA) (NA)
2211A	Other fabricated cotton textile products (made in weaving mills) <sup>32</sup> --	1982__ 99.8	(D)	(D)	(X)	(X)	(X)
22110	Cotton broad woven fabrics and fabricated products, n.s.k. <sup>32</sup> -----	1982__ 136.2	(X)	(X)	(X)	(X)	(X)
2221-	Weaving mills, manmade fiber and silk -----	1982__ <sup>257</sup> 820.3 1977__ <sup>255</sup> 981.5 1972__ <sup>253</sup> 520.0 1967__ <sup>252</sup> 394.3 1963__ <sup>251</sup> 760.2	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	(NA) (NA) (NA) (NA) (NA)
22211	100 percent filament rayon and/or acetate fabrics -----	1982__ 280.5 1977__ 265.7 1972__ 261.5 1967__ 277.8	64 53 46 53	79 69 63 70	97 92 85 86	100 100 99+ 99	1 647 (NA) (NA) (NA)
22212	100 percent filament fabrics, except rayon, acetate -----	1982__ 1 448.7 1977__ 1 149.5 1972__ 514.3 1967__ 292.5	59 56 56 57	73 72 68 72	90 90 86 93	100 99 99+ 100	1 129 (NA) (NA) (NA)
22213	100 percent spun rayon, acetate fabrics, inc. blends -----	1982__ 80.6 1977__ 184.3 1972__ 183.0 1967__ 226.8	51 44 44 52	81 73 68 79	100 98 93 96	(X) 100 100 100	968 (NA) (NA) (NA)
22214	100 percent spun polyester blends with cotton -----	1982__ 2 309.7 1977__ 1 664.1 1972__ 1 004.6 1967__ 502.0	42 51 45 53	63 78 69 79	89 98 95 97	100 100 100 100	678 (NA) (NA) (NA)
22215	All other 100 percent spun noncellulosic fabrics -----	1982__ 650.6 1977__ 404.0 1972__ 267.7 1967__ 165.4	46 44 57 71	65 68 72 87	91 94 93 98	100 100 100 100	834 (NA) (NA) (NA)
22216	Combinations of filament and spun yarn fabrics, chiefly manmade fibers -----	1982__ 614.7 1977__ 461.5 1972__ 279.3 1967__ 195.0	59 45 53 52	77 61 70 69	96 88 90 90	100 100 100 99	1 174 (NA) (NA) (NA)
22217	Blanketing, silk, paper, and other specialty manmade fiber fabrics ---	1982__ 435.5 1977__ 171.7 1972__ 101.8 1967__ 219.1	50 67 43 41	67 86 69 55	93 (D) 97 78	100 100 100 98	845 (NA) (NA) (NA)
22218	Finished manmade fiber and silk broad woven fabrics, finished in weaving mills (also see code 22628) -----	1982__ (5) 1977__ (5) 1972__ (5) 1967__ (5) 1963__ (5) 1958__ (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(NA) (NA) (NA) (NA) (NA) (NA)
22219	Manmade fibers and silk sheets and pillowcases, made in weaving mills (also see code 23922) -----	1982__ (5) 1977__ (5)	(5) (5)	(5) (5)	(5) (5)	(5) (5)	(NA) (NA)
2221A	Other fabricated manmade fiber and silk textile products, made in weaving mills (towels, washcloths, etc.) <sup>33</sup> -----	1982__ 86.2	89	97	100	(X)	(D)
22210	Manmade fiber and silk broad woven fabrics and fabricated products, n.s.k. <sup>33</sup> -----	1982__ 341.2	(X)	(X)	(X)	(X)	(X)
2231-	Wool broad woven fabrics -----	1982__ <sup>348</sup> 334.0 1977__ <sup>355</sup> 54.5 1972__ <sup>354</sup> 14.0 1967__ <sup>358</sup> 51.8 1963__ <sup>358</sup> 34.7 1958__ <sup>358</sup> 40.0	( <sup>34</sup> ) 36 34 51 46 38	( <sup>34</sup> ) 46 45 59 55 46	( <sup>34</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> )	( <sup>34</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> )	(NA) (NA) (NA) (NA) (NA) (NA)
22311	Finished wool yarn, tops or raw stock, not combed or spun at same establishment -----	1982__ (D) 1977__ 39.5 1972__ 61.5 1967__ 65.7 1963__ 63.7 1958__ 27.1	(D) 75 59 78 74 85	(D) 92 84 92 95 98	(D) 100 100 100 100 100	(X) (X) (X) (X) (X) (X)	(D) (NA) (NA) (NA) (NA) (NA)
22312	Wool fabrics (gray goods) -----	1982__ 137.8 1977__ 97.3 1972__ 31.4 1967__ 137.3 1963__ 129.9 1958__ 128.5	79 55 80 81 73 62	92 81 95 94 87 73	100 100 100 99 99 87	(X) (X) (X) 100 99+ 97	(D) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
22	TEXTILE MILL PRODUCTS—Con.						
2231- 22313	Wool broad woven fabrics—Con. Finished wool apparel fabrics.....	1982.. 501.4 1977.. 299.3 1972.. 213.5 1967.. 533.6 1963.. 547.5 1958.. 581.5	60 49 49 56 49 38	79 69 64 67 59 47	99+ (D) 87 82 74 65	100 100 100 98 93 87	1 361 (NA) (NA) (NA) (NA) (NA) (NA)
22314	Finished wool nonapparel fabrics and felts.....	1982.. 68.7 1977.. 83.2 1972.. 80.1 1967.. 68.9 1963.. 66.1 1958.. 64.0	79 62 49 56 59 58	97 83 75 75 76 74	100 100 99 97 97 96	(X) (X) 100 100 100 100	1 675 (NA) (NA) (NA) (NA) (NA) (NA)
22319	Wool or chiefly wool woven blankets (made in weaving mill) .....	1982.. 24.5 1977.. 9.2 1972.. 13.0 1967.. 17.5 1963.. 16.9 1958.. 15.8	73 79 89 84 67 73	87 (D) (D) (D) 87 89	100 100 100 (D) 100 100	(X) (X) (X) (X) (X) (X)	1 958 (NA) (NA) (NA) (NA) (NA) (NA)
22310	Woven wool fabrics and fabricated products, n.s.k. ....	1982.. 44.3 1977.. 26.0 1972.. 14.5 1967.. 28.8 1963.. 10.6 1958.. 23.0	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2241-	Narrow fabrics mills.....	1982.. 826.1 1977.. 645.0 1972.. 521.5 1967.. 411.0 1963.. 303.2 1958.. 270.4 1954.. 249.9	20 16 18 17 15 15 14	30 25 28 27 25 23 21	52 46 46 45 42 38 36	76 71 68 67 63 59 (NA)	204 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
22411	Woven narrow fabrics .....	1982.. 568.2 1977.. 413.5 1972.. 355.2 1967.. 292.0 1963.. 211.1 1958.. 179.5	27 22 21 23 20 18	41 36 35 35 32 27	67 60 54 54 50 46	89 86 79 77 73 69	347 (NA) (NA) (NA) (NA) (NA) (NA)
22414	Braided narrow fabrics.....	1982.. 135.7 1977.. 133.4 1972.. 103.8 1967.. 71.9 1963.. 59.8 1958.. 57.4	31 29 31 26 30 25	49 48 48 43 46 39	77 80 76 73 70 65	99+ 100 98 97 94 90	421 (NA) (NA) (NA) (NA) (NA) (NA)
22415	Covered rubber thread.....	1982.. 86.8 1977.. 56.1 1972.. 40.0 1967.. 35.6 1963.. 26.9 1958.. 25.3 1954.. 21.4	72 68 56 49 60 59 71	87 87 78 73 77 75 86	99+ 100 99+ 98 97 96 99	100 (X) 100 100 100 100 (NA)	1 687 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
22410	Narrow fabrics, n.s.k. ....	1982.. 35.4 1977.. 42.0 1972.. 22.5 1967.. 11.5 1963.. 5.4 1958.. 8.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2251-	Women's hosiery, except socks .....	1982.. 1 425.3 1977.. 819.1 1972.. 899.5 1967.. 805.8 1963.. 582.7	59 50 34 29 34	67 61 47 42 46	78 77 67 61 62	92 92 85 79 78	1 484 (NA) (NA) (NA) (NA) (NA)
22512	Women's and misses' finished seamless hosiery, full-length and knee-length (except pantyhose) <sup>36</sup> .....	1982.. 353.4	38	50	74	95	527
22516	Women's and misses' finished pantyhose <sup>36</sup> .....	1982.. 943.2	74	81	92	100	2 553
22517	Women's and misses' hosiery shipped in the greige <sup>36</sup> .....	1982.. 85.6	50	71	96	100	984
22510	Women's and misses' hosiery, except socks, n.s.k. ....	1982.. 43.1 1977.. 37.3 1972.. 21.2 1967.. 37.2 1963.. 6.4	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2252-	Hosiery, n.e.c. ....	1982.. 1 324.5 1977.. 893.6 1972.. 588.7 1967.. 454.5	20 19 21 22	29 29 31 29	46 45 47 44	66 65 67 64	181 (NA) (NA) (NA) (NA)

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
22	TEXTILE MILL PRODUCTS—Con.						
2252-	Hosiery, n.e.c.—Con.						
	1963..	402.4	16	22	35	54	(NA)
22522	Men's finished seamless hosiery (sizes 10 or larger) .....	1982.. 655.0	23	35	57	82	256
	1977..	464.6	24	36	59	82	(NA)
	1972..	285.9	27	40	61	85	(NA)
	1967..	238.3	24	34	54	80	(NA)
	1963..	202.1	17	27	45	70	(NA)
22523	All other finished seamless hosiery.....	1982.. 452.1	23	34	57	84	255
	1977..	274.3	26	36	57	84	(NA)
	1972..	188.7	27	39	61	84	(NA)
	1967..	131.7	25	39	60	85	(NA)
	1963..	149.4	17	27	44	68	(NA)
22524	Seamless hosiery shipped in the greige, except women's full-length and knee-length .....	1982.. 155.6	44	55	73	95	753
	1977..	93.5	42	55	77	99	(NA)
	1972..	78.6	42	54	72	93	(NA)
	1967..	61.0	45	58	76	95	(NA)
	1963..	43.2	40	50	70	91	(NA)
22520	Hosiery, n.e.c., n.s.k., except women's seamless full-length hosiery and pantyhose .....	1982.. 61.9	(X)	(X)	(X)	(X)	(X)
	1977..	61.2	(X)	(X)	(X)	(X)	(NA)
	1972..	35.5	(X)	(X)	(X)	(X)	(NA)
	1967..	23.5	(X)	(X)	(X)	(X)	(NA)
	1963..	7.8	(X)	(X)	(X)	(X)	(NA)
2253-	Knit outerwear mills .....	1982.. <sup>§3</sup> 154.2	19	28	44	63	149
	1977..	<sup>§2</sup> 136.6	15	25	42	59	(NA)
	1972..	<sup>§1</sup> 571.2	15	25	41	56	(NA)
	1967..	<sup>§1</sup> 170.0	11	17	28	43	(NA)
	<sup>37</sup> 1963..	<sup>§9</sup> 45.8	7	12	22	38	(NA)
	<sup>38</sup> 1963..	<sup>§8</sup> 40.0	7	12	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	<sup>39</sup> 1958..	<sup>§6</sup> 34.8	5	10	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
22531	Sweaters, knit jackets, and jerseys made from yarns or fabric knit in same establishment (also see codes 23292, 23397, and 23691) .....	1982.. <sup>§8</sup> 17.6	22	35	59	82	236
	1977..	<sup>§5</sup> 55.5	19	33	55	79	(NA)
	1972..	<sup>§4</sup> 73.9	18	29	46	70	(NA)
	1967..	<sup>§5</sup> 06.0	15	23	39	59	(NA)
	1963..	<sup>§4</sup> 83.2	10	16	30	51	(NA)
	<sup>39</sup> 1958..	<sup>§4</sup> 26.7	7	12	24	43	(NA)
22532	Knit outerwear sport shirts, from fabric knit in same establishment (also see codes 23212, 23312, and 23612) .....	1982.. <sup>§1</sup> 008.2	43	60	83	98	653
	1977..	<sup>§5</sup> 18.1	38	55	83	98	(NA)
	1972..	<sup>§3</sup> 42.8	40	59	79	97	(NA)
	1967..	<sup>§2</sup> 10.9	24	37	62	89	(NA)
	1963..	<sup>§1</sup> 59.9	24	40	62	86	(NA)
	<sup>39</sup> 1958..	<sup>§1</sup> 16.9	22	35	62	90	(NA)
	1954..	<sup>§1</sup> 66.7	13	21	39	(NA)	(NA)
22533	All other knit outerwear products (from yarns or fabrics knit in same establishment) .....	1982.. <sup>§8</sup> 56.6	39	50	67	88	490
	1977..	<sup>§6</sup> 89.7	28	43	64	86	(NA)
	1972..	<sup>§4</sup> 45.0	33	50	73	92	(NA)
	1967..	<sup>§2</sup> 25.0	38	49	66	87	(NA)
	1963..	<sup>§1</sup> 42.8	24	38	60	83	(NA)
	<sup>39</sup> 1958..	<sup>§6</sup> 8.7	27	41	60	84	(NA)
22539	Contract and commission receipts for knitting only or knitting and finishing outerwear products .....	1982.. 209.8	15	22	36	56	103
	1977..	154.2	15	26	47	69	(NA)
	1972..	205.8	13	20	37	57	(NA)
	1967..	131.1	10	17	30	50	(NA)
	1963..	109.5	9	15	26	45	(NA)
22530	Knit outerwear mill products, n.s.k. ....	1982.. 262.0	(X)	(X)	(X)	(X)	(X)
	1977..	219.1	(X)	(X)	(X)	(X)	(NA)
	1972..	103.7	(X)	(X)	(X)	(X)	(NA)
	1967..	97.0	(X)	(X)	(X)	(X)	(NA)
	1963..	54.1	(X)	(X)	(X)	(X)	(NA)
	<sup>39</sup> 1958..	22.5	(X)	(X)	(X)	(X)	(NA)
2254-	Knit underwear mills .....	1982.. <sup>§7</sup> 67.4	46	62	85	98	931
	1977..	<sup>§5</sup> 79.5	38	56	83	98	(NA)
	1972..	<sup>§4</sup> 81.4	44	58	81	97	(NA)
	1967..	<sup>§3</sup> 96.7	34	50	72	92	(NA)
	1963..	<sup>§3</sup> 36.4	30	48	68	89	(NA)
	<sup>39</sup> 1958..	<sup>§2</sup> 88.5	27	41	60	84	(NA)
22541	Men's and boys' knit underwear and nightwear, from yarns or fabrics knit in same establishment) (also see codes 23215 and 23220) .....	1982.. <sup>§5</sup> 74.8	59	77	95	100	1 527
	1977..	<sup>§4</sup> 31.0	50	71	92	100	(NA)
	1972..	<sup>§3</sup> 60.2	54	70	92	99+	(NA)
	1967..	<sup>§2</sup> 71.0	50	66	83	98	(NA)
	1963..	<sup>§2</sup> 21.5	44	61	78	93	(NA)
	<sup>39</sup> 1958..	<sup>§1</sup> 73.5	42	57	75	93	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
22	TEXTILE MILL PRODUCTS—Con.							
2254- 22542	Knit underwear mills—Con. Women's and children's knit underwear from fabrics knit in same establishment (also see code 23412)-----	1982-- 1977-- 1972-- 1967-- 1963-- 391958--	\$125.3 \$95.4 \$73.0 \$76.5 \$70.8 \$75.5	64 51 50 43 36 27	80 73 70 63 55 43	98 94 94 86 77 69	100 100 100 100 98 92	1 153 (NA) (NA) (NA) (NA) (NA) (NA)
22543	Women's and children's knit nightwear, from fabrics knit in same establishment (also see code 23413)-----	1982-- 1977-- 1972-- 1967-- 1963-- 391958--	\$61.9 \$50.0 \$45.9 \$45.5 \$43.1 \$39.5	65 66 50 48 47 49	90 91 79 70 72 67	100 100 100 99 96 91	(X) (X) (X) (X) 100 98	1 284 (NA) (NA) (NA) (NA) (NA) (NA)
22540	Knit underwear and nightwear, n.s.k., made from yarns or fabric knit in same establishment-----	1982-- 1977-- 1972-- 1967-- 1963--	5.4 3.1 2.3 3.7 1.1	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
2257-	Circular knit fabric mills-----	1982-- 1977-- 1972--	2 494.9 3 111.2 2 756.7	20 18 20	31 29 28	49 48 46	70 69 66	183 (NA) (NA)
22571	Weft knit fabric greige goods, except hosiery <sup>11</sup> -----	1982-- 1977-- 1972--	467.6 343.5 165.4	49 49 59	64 73 72	88 92 92	100 100 100	830 (NA) (NA)
22572	Weft knit underwear and nightwear finished fabric, except hosiery <sup>11</sup> -----	1982-- 1977-- 1972--	126.3 139.5 82.4	79 51 54	96 78 76	100 99 99+	(X) 100 100	1 852 (NA) (NA)
22574	Weft knit high pile finished fabric (including overcoating, topcoating, footwear lining, etc.) <sup>11</sup> -----	1982-- 1977-- 1972--	147.4 202.3 185.0	57 72 70	92 92 88	(D) 100 100	(X) (X) (X)	1 193 (NA) (NA)
22575	Weft single knit outerwear finished fabric, except hosiery <sup>11</sup> -----	1982-- 1977--	735.0 564.6	38 36	54 54	81 84	99+ 99+	521 (NA)
22577	Weft double knit outerwear finished fabric (including interlock) <sup>11</sup> ----	1982-- 1977--	412.5 1 050.8	34 28	55 46	87 69	100 94	519 (NA)
22578	All other weft knit finished fabric, except hosiery <sup>11</sup> -----	1982-- 1977-- 1972--	146.4 364.5 156.1	41 58 58	64 75 78	93 93 95	100 100 100	656 (NA) (NA)
22579	Contract and commission receipts for knitting only or knitting and finishing-----	1982-- 1977-- 1972--	282.5 286.1 389.8	25 21 11	39 37 20	64 61 37	89 84 61	296 (NA) (NA)
22570	Circular knit fabric, n.s.k.-----	1982-- 1977-- 1972--	177.1 159.9 120.8	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
2258-	Warp knit fabric mills-----	1982-- 1977-- 1972--	1 567.5 1 568.4 928.6	31 26 25	48 40 44	68 64 69	86 85 88	394 (NA) (NA)
22581	Warp knit fabric greige goods (tricot, raschel, simplex, and milanese) <sup>11</sup> -----	1982-- 1977-- 1972--	445.5 363.3 151.9	37 51 43	54 73 63	80 95 88	97 100 99+	527 (NA) (NA)
22582	Warp knit underwear and nightwear finished fabric <sup>11</sup> -----	1982-- 1977-- 1972--	321.0 405.2 276.0	57 38 44	78 56 71	99 87 98	100 100 100	1 423 (NA) (NA)
22583	Warp knit outerwear fabric (including dress, blouse, shirting, slack, etc.) <sup>11</sup> -----	1982-- 1977-- 1972--	261.2 328.2 212.5	71 44 41	90 64 65	(D) 90 95	(D) 100 100	1 711 (NA) (NA)
22588	All other warp knit finished fabric (1977 product class 22584) <sup>11</sup> ----	1982-- 1977-- 1972--	379.6 302.9 186.8	50 38 39	74 56 56	98 81 87	100 99 100	879 (NA) (NA)
22589	Contract and commission receipts for knitting only or knitting and finishing <sup>11</sup> -----	1982-- 1977-- 1972--	114.5 138.7 95.5	50 45 31	63 64 50	82 87 75	99 99+ 93	1 086 (NA) (NA)
22580	Warp knit fabric, n.s.k.-----	1982-- 1977-- 1972--	45.7 30.1 5.9	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
22590	Knit gloves and other knit products, n.e.c. (also see product classes 23811 and 23812)-----	1982-- 1977-- 1972-- 1967-- 1963-- 391958--	\$133.5 \$112.9 \$85.0 \$35.7 \$39.9 \$31.4	42 31 40 54 32 30	56 42 58 71 48 49	78 59 78 89 73 73	97 79 96 99 94 94	648 (NA) (NA) (NA) (NA) (NA) (NA)
2261-	Finished cotton broad woven fabrics-----	1982--	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
22	TEXTILE MILL PRODUCTS—Con.						
2261-	Finished cotton broad woven fabrics—Con.						
	1977 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1972 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1967 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1963 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1958 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
22617	Finished cotton broad woven fabrics, not finished in weaving mills (also see code 22117) -----						
	1982 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1977 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1972 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1967 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1963 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1958 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
22610	Cotton broad woven fabric finishing, n.s.k. -----						
	1982 ..	34.0	(X)	(X)	(X)	(X)	(X)
	1977 ..	9.6	(X)	(X)	(X)	(X)	(NA)
	1972 ..	19.9	(X)	(X)	(X)	(X)	(NA)
	1967 ..	4.7	(X)	(X)	(X)	(X)	(NA)
	1963 ..	17.3	(X)	(X)	(X)	(X)	(NA)
2262-	Finishing plants, manmade fiber and silk -----						
	1982 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1977 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1972 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1967 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1963 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1958 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
22628	Finished manmade fiber and silk broad woven fabrics, not finished in weaving mills (also see code 22218) -----						
	1982 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1977 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1972 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1967 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1963 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1958 ..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
22620	Finished manmade fiber, silk broad woven fabrics, n.s.k. -----						
	1982 ..	8.5	(X)	(X)	(X)	(X)	(X)
	1977 ..	3.7	(X)	(X)	(X)	(X)	(NA)
	1972 ..	8.2	(X)	(X)	(X)	(X)	(NA)
	1967 ..	14.4	(X)	(X)	(X)	(X)	(NA)
	1963 ..	3.3	(X)	(X)	(X)	(X)	(NA)
	1958 ..	6.0	(X)	(X)	(X)	(X)	(NA)
22690	Finished yarn, raw stock, and narrow fabric, except knit and wool (not spun, throw, woven, or braided in the same establishment) (also see codes 22811, 22812, 22813, and 22814) -----						
	1982 ..	<sup>5</sup> 920.6	33	46	71	92	392
	1977 ..	<sup>5</sup> 764.9	32	46	69	90	(NA)
	1972 ..	<sup>5</sup> 539.9	(S)	(S)	(S)	(S)	(NA)
	1967 ..	<sup>5</sup> 211.7	33	47	68	89	(NA)
	1963 ..	<sup>5</sup> 160.6	33	48	75	95	(NA)
	1958 ..	<sup>5</sup> 135.9	41	56	78	93	(NA)
22710	Woven carpets and rugs -----						
	1982 ..	222.9	63	81	94	99+	1 272
	1977 ..	167.9	69	81	95	99+	(NA)
	1972 ..	202.5	62	80	95	99	(NA)
	1967 ..	223.4	60	84	97	100	(NA)
	1963 ..	250.8	61	83	97	100	(NA)
	1958 ..	297.8	50	70	95	99	(NA)
22720	Tufted carpets and rugs -----						
	1982 ..	5 213.6	25	41	66	86	307
	1977 ..	4 172.2	20	34	60	80	(NA)
	1972 ..	2 625.8	21	34	57	80	(NA)
	1967 ..	1 332.4	26	42	67	88	(NA)
	1963 ..	779.1	25	40	64	86	(NA)
	1958 ..	319.9	28	43	68	94	(NA)
22790	Carpets, rugs, and mats, n.e.c. -----						
	1982 ..	155.9	49	64	87	98	909
	1977 ..	93.0	47	65	88	98	(NA)
	1972 ..	116.5	50	70	87	98	(NA)
	1967 ..	95.5	72	82	92	99	(NA)
	1963 ..	51.8	46	59	78	94	(NA)
	1958 ..	48.8	52	63	79	94	(NA)
2281-	Spun yarns, except wool -----						
	1982 ..	<sup>5</sup> 4 519.6	21	34	57	81	232
	1977 ..	<sup>5</sup> 4 156.4	20	31	50	74	(NA)
	1972 ..	<sup>5</sup> 2 332.8	20	30	47	71	(NA)
	1967 ..	<sup>5</sup> 1 574.6	20	29	47	70	(NA)
	1963 ..	<sup>5</sup> 1 183.8	16	26	43	65	(NA)
	1958 ..	<sup>5</sup> 903.7	15	24	50	62	(NA)
22811	Carded cotton yarns (also see code 22690) -----						
	1982 ..	<sup>5</sup> 939.2	37	53	77	96	492
	1977 ..	<sup>5</sup> 905.6	32	50	73	93	(NA)
	1972 ..	<sup>5</sup> 523.7	18	32	58	86	(NA)
	1967 ..	<sup>5</sup> 404.6	22	36	58	83	(NA)
	1963 ..	<sup>5</sup> 377.1	21	32	53	80	(NA)
	1958 ..	<sup>5</sup> 328.2	19	30	50	75	(NA)
22812	Combed cotton yarns (also see code 22690) -----						
	1982 ..	<sup>5</sup> 350.5	48	65	91	100	828
	1977 ..	<sup>5</sup> 20.6	37	52	78	99+	(NA)
	1972 ..	<sup>5</sup> 297.9	37	53	76	99	(NA)
	1967 ..	<sup>5</sup> 304.1	27	41	65	93	(NA)
	1963 ..	<sup>5</sup> 310.5	26	39	61	90	(NA)
	1958 ..	<sup>5</sup> 281.9	23	35	57	85	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
22	TEXTILE MILL PRODUCTS—Con.							
2281- 22813	Spun yarns, except wool—Con. Rayon and/or acetate yarns (also see code 22690) -----	1982... 1977... 1972... 1967... 1963... 1958...	\$149.3 \$199.4 \$225.3 \$190.9 \$153.4 \$106.9	47 46 40 35 30 34	68 64 56 49 43 47	94 88 80 71 68 70	100 99+ 98 95 94 95	845 (NA) (NA) (NA) (NA) (NA) (NA)
22814	Spun noncellulosic fiber and silk yarns (also see code 22690) -----	1982... 1977... 1972... 1967... 1963... 1958...	\$3 001.2 \$2 485.9 \$1 239.5 \$642.5 \$326.5 \$166.8	26 26 29 33 34 39	39 38 42 46 49 51	64 58 64 70 73 74	91 83 86 92 95 96	306 (NA) (NA) (NA) (NA) (NA) (NA)
22810	Spun yarns, except wool, gray or spun and finished, n.s.k.-----	1982... 1977... 1972... 1967... 1963... 1958...	79.3 44.9 46.4 32.5 16.2 19.9	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2282-	Throwing and winding mills -----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>35</sup> 1 863.0 <sup>35</sup> 1 496.8 <sup>35</sup> 1 694.4 <sup>35</sup> 538.3 <sup>35</sup> 302.9 <sup>35</sup> 172.4	52 38 35 52 45 34	63 49 51 65 56 46	( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> )	( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> ) ( <sup>35</sup> )	(NA) (NA) (NA) (NA) (NA) (NA)
22822	Rewound, plied, etc., yarns other than wool -----	1982... 1977... 1972... 1967... 1963... 1958...	194.3 109.3 100.7 71.6 69.0 51.4	54 83 60 63 46 44	74 93 80 80 71 65	97 100 96 96 94 91	100 (X) 100 100 100 100	1 025 (NA) (NA) (NA) (NA) (NA)
22823	Thrown filament yarns, except textured -----	1982... 1977... 1972... 1967...	151.3 136.1 119.1 81.4	49 35 61 64	71 54 76 76	95 86 94 91	100 100 100 99	853 (NA) (NA) (NA)
22825	Textured, crimped, or bulked filament yarns made from purchased filament yarn (also see code 28246) <sup>11</sup> -----	1982... 1977...	( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> )	(NA) (NA)
22820	Textured, thrown, and rewound yarn, n.s.k. -----	1982... 1977... 1972... 1967...	29.9 30.8 9.0 19.5	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
2283-	Wool yarn mills -----	1982... 1977... 1972... 1967... 1963... 1958...	248.2 234.4 220.5 335.5 411.7 278.5	41 44 32 25 24 22	56 59 48 38 39 34	80 81 76 63 63 56	98 98 96 90 87 85	620 (NA) (NA) (NA) (NA) (NA) (NA)
22831	Wool yarns, except carpet -----	1982... 1977... 1972... 1967... 1963... 1958...	187.3 177.6 133.0 239.1 271.1 180.7	49 53 36 30 25 19	66 71 54 46 43 32	92 96 85 70 69 60	100 100 (D) 98 93 91	918 (NA) (NA) (NA) (NA) (NA) (NA)
22832	Wool yarns, carpet -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	33.9 37.4 70.7 78.7 140.7 97.9 77.9	82 58 72 55 56 53 75	(D) 80 87 78 75 75 88	(D) 100 99+ 98 94 96 99	(X) (X) 100 100 100 99 (NA)	2 649 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
22830	Wool yarn, n.s.k. -----	1982... 1977... 1972... 1967...	27.0 19.4 16.8 17.7	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
22840	Thread <sup>40</sup> -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	614.6 551.1 340.3 248.1 194.3 163.0 167.0	60 58 58 62 63 61 61	75 77 74 77 80 71 73	90 91 90 93 95 87 88	99+ 99 99 99 99 98 (NA)	1 021 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
22910	Pressed, punched, or needled felts, except hats -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	266.3 186.2 131.2 131.0 119.6 94.1 89.1	56 47 50 50 50 43 42	79 72 69 70 68 62 63	96 95 93 96 94 91 89	100 100 100 100 100 99 (NA)	1 038 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
22920	Lace and net goods-----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	68.0 39.8 41.7 55.8 49.4 55.0 54.6	47 57 28 29 26 22 27	65 73 50 51 47 38 45	89 89 77 77 75 69 70	99+ 100 95 93 92 87 (NA)	761 (NA) (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.



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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
22	TEXTILE MILL PRODUCTS—Con.						
22930	Paddings and upholstery filling, batting, and wadding ----- 1982--	287.9	34	48	69	92	393
	1977--	260.6	28	43	66	87	(NA)
	1972--	154.3	24	38	58	84	(NA)
	1967--	164.5	28	40	61	82	(NA)
	1963--	150.3	30	45	64	83	(NA)
	1958--	137.8	27	40	58	78	(NA)
	1954--	149.4	30	48	65	(NA)	(NA)
22940	Processed mill waste and related products ----- 1982--	193.9	40	59	83	97	637
	1977--	164.2	41	58	82	95	(NA)
	1972--	124.8	50	64	84	97	(NA)
	1967--	82.0	43	55	73	90	(NA)
	1963--	83.3	43	56	72	90	(NA)
	1958--	74.3	22	33	54	79	(NA)
	1954--	76.6	18	31	55	(NA)	(NA)
2295-	Coated fabrics, not rubberized ----- 1982--	1 069.3	24	37	56	79	238
	1977--	987.1	37	52	69	86	(NA)
	1972--	842.3	32	48	67	85	(NA)
	1967--	571.3	26	43	67	86	(NA)
	1963--	427.3	33	50	73	88	(NA)
	1958--	245.2	36	54	72	90	(NA)
	1954--	215.2	38	58	78	(NA)	(NA)
22951	Pyroxylin coated fabrics ----- 1982--	44.1	71	93	100	(X)	1 978
	1977--	37.6	86	97	100	(X)	(NA)
	1972--	26.3	80	92	100	(X)	(NA)
	1967--	38.6	75	87	100	(X)	(NA)
	1963--	39.3	72	86	99	100	(NA)
	1958--	38.4	60	77	98	100	(NA)
	1954--	49.1	54	71	93	(NA)	(NA)
22952	Vinyl coated fabrics ----- 1982--	628.5	35	52	76	97	468
	1977--	680.5	53	68	86	98	(NA)
	1972--	608.2	43	62	83	98	(NA)
	1967--	345.2	41	63	85	99	(NA)
	1963--	233.4	47	71	90	99	(NA)
	1958--	121.2	47	67	90	99	(NA)
	1954--	115.9	55	73	92	(NA)	(NA)
22953	Other coated fabrics ----- 1982--	332.4	28	42	71	99	384
	1977--	220.7	33	48	74	99	(NA)
	1972--	153.9	27	44	69	93	(NA)
	1967--	164.5	42	58	78	98	(NA)
	1963--	137.4	42	53	76	94	(NA)
	1958--	80.6	47	61	82	98	(NA)
	1954--	50.3	54	69	88	(NA)	(NA)
22950	Coated fabrics, not rubberized, n.s.k. ----- 1982--	64.3	(X)	(X)	(X)	(X)	(X)
	1977--	48.3	(X)	(X)	(X)	(X)	(NA)
	1972--	35.9	(X)	(X)	(X)	(X)	(NA)
	1967--	23.0	(X)	(X)	(X)	(X)	(NA)
	1963--	17.2	(X)	(X)	(X)	(X)	(NA)
	1958--	5.0	(X)	(X)	(X)	(X)	(NA)
22960	Tire cord and tire fabrics ----- 1982--	892.2	78	98	100	(X)	2 456
	1977--	919.8	78	(D)	100	(X)	(NA)
	1972--	620.8	81	96	100	(X)	(NA)
	1967--	404.6	74	91	100	(X)	(NA)
	1963--	349.2	71	87	100	(X)	(NA)
	1958--	332.1	64	86	100	(X)	(NA)
2297-	Nonwoven fabrics ----- 1982--	1 658.8	42	56	75	92	633
	1977--	1 095.2	38	55	77	95	(NA)
	1972--	521.0	43	57	79	95	(NA)
22971	Nonwoven fabrics <sup>11</sup> ----- 1982--	1 263.0	48	64	84	98	887
	1977--	782.5	48	66	90	99	(NA)
	1972--	376.1	57	71	88	99+	(NA)
22972	Fabricated nonwoven products <sup>11</sup> ----- 1982--	41360.4	40	63	91	99+	652
	1977--	41260.8	36	59	90	100	(NA)
	1972--	41124.3	33	60	93	100	(NA)
22970	Nonwoven fabrics, n.s.k. ----- 1982--	35.4	(X)	(X)	(X)	(D)	(X)
	1977--	51.9	(X)	(X)	(X)	(X)	(NA)
	1972--	20.6	(X)	(X)	(X)	(X)	(NA)
2298-	Cordage and twine ----- 1982--	336.0	23	39	63	84	267
	1977--	291.7	29	45	68	89	(NA)
	1972--	175.8	31	48	69	88	(NA)
	1967--	174.9	33	49	73	92	(NA)
	1963--	145.0	30	47	71	90	(NA)
	1958--	132.3	36	53	74	92	(NA)
	1954--	159.9	38	55	76	(NA)	(NA)
22981	Hard fiber cordage and twine ----- 1982--	58.3	58	77	99	100	1 137
	1977--	42.5	74	92	100	(X)	(NA)
	1972--	42.2	63	88	100	(X)	(NA)
	1967--	36.3	69	89	100	(X)	(NA)
	1963--	42.3	64	88	99	100	(NA)
	1958--	52.3	62	85	99	100	(NA)
	1954--	64.8	69	87	99	(NA)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
22	TEXTILE MILL PRODUCTS—Con.						
2298- 22982	Cordage and twine—Con. Soft fiber cordage and twine, except cotton -----	1982... 228.1 1977... 183.8 1972... 87.4 1967... 83.3 1963... 59.8 1958... 34.1 1954... 42.5	28 31 36 41 30 30 31	45 48 53 59 48 48 48	75 73 78 83 72 81 79	96 95 98 99 94 99 (NA)	384 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
22983	Cotton cordage and twine -----	1982... 21.8 1977... 47.7 1972... 30.7 1967... 43.4 1963... 38.2 1958... 40.4 1954... 52.6	46 66 59 47 47 59 61	71 83 79 70 70 78 79	99+ 100 98 95 95 94 94	100 (X) 100 100 99 (D) (NA)	811 (NA) (NA) (NA) (NA) (NA) (NA)
22980	Cordage and twine, n.s.k. -----	1982... 27.8 1977... 17.7 1972... 15.5 1967... 11.9 1963... 4.8 1958... 5.5	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2299-	Textile goods, n.e.c.-----	1982... 397.6 1977... 280.8 1972... 215.3	45 31 32	61 43 41	74 59 58	86 74 75	725 (NA) (NA)
22992	Jute and linen goods, except felts, cord, and twine -----	1982... 24.6 1977... 37.5 1972... 21.0 1967... 29.9 1963... 42.9 1958... 54.0	65 69 68 70 57 56	87 85 89 87 71 67	100 100 100 98 91 84	(X) (X) (X) — 100 98	1 282 (NA) (NA) (NA) (NA) (NA)
22993	Scouring and combing mill products (1967 product class 22970) ----	1982... 195.5 1977... 96.8 1972... 60.8 1967... 89.9 1963... 111.1 1958... 89.7 1954... 91.0	75 77 92 80 71 72 (D)	94 94 98 90 86 83 81	(D) (X) 99+ 98 98 94 93	(D) (X) 100 100 99 99 (NA)	2 267 (NA) (NA) (NA) (NA) (NA) (NA)
22990	Textile goods, n.e.c., n.s.k. -----	1982... 177.4 1977... 146.5 1972... 133.5 1967... 37.1 1963... 10.4	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
23	APPAREL AND OTHER TEXTILE PRODUCTS						
2311-	Men's and boys' suits and coats -----	1982... 2 932.9 1977... 2 719.2 1972... 2 234.2 1967... 1 779.6 37 1963... 1 439.7  38 1963... 1 195.4 39 1958... 1 000.9 39 1954... 927.1	25 20 19 17 14  13 13 11	36 30 30 27 22  22 20 18	57 46 46 42 37  (35) (35) 33	74 66 65 59 55  (35) (35) (NA)	254 (NA) (NA) (NA) (NA)  (NA) (NA) (NA)
23111	Men's suits, including uniforms and leisure -----	1982... 1 078.6 1977... 1 273.4 1972... 898.5 1967... 789.1 1963... 727.1 39 1958... 629.6	37 33 28 25 17 15	51 45 42 38 29 26	74 66 64 60 50 44	95 85 83 82 75 67	556 (NA) (NA) (NA) (NA) (NA)
23112	Men's overcoats and tailored car coats -----	1982... 126.6 1977... 179.8 1972... 100.4 1967... 130.5 1963... 121.8 39 1958... 129.0	31 28 31 20 18 14	53 46 48 32 28 24	88 75 77 57 50 45	100 97 98 89 77 72	490 (NA) (NA) (NA) (NA) (NA)
23113	Men's tailored dress and sport coats and jackets -----	1982... 944.0 1977... 623.0 1972... 626.5 1967... 379.5 1963... 214.6 39 1958... 147.3	24 19 18 15 12 11	42 33 30 25 21 19	73 62 52 46 41 35	93 85 78 72 67 59	329 (NA) (NA) (NA) (NA) (NA)
23114	Boys' suits, coats, and tailored jackets -----	1982... 148.2 1977... 149.7 1972... 100.0 1967... 111.6 1963... 102.6 39 1958... 76.9	63 41 42 26 19 18	78 58 58 40 30 28	99 87 84 65 54 50	100 100 99 93 80 79	1 194 (NA) (NA) (NA) (NA) (NA)
23119	Commission work on men's and boys' suits and coats -----	1982... 493.6 1977... 371.5 1972... 445.5 1967... 304.3 1963... 243.3	22 20 23 23 23	37 35 32 29 33	58 53 44 42 45	81 77 63 62 62	240 (NA) (NA) (NA) (NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.						
2311- 23110	Men's and boys' suits and coats—Con. Men's and boys' suits, coats, and overcoats, n.s.k. -----	1982... 141.9 1977... 121.8 1972... 63.3 1967... 64.6 1963... 29.3 39 1958... 18.1	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2321-	Men's and boys' shirts and nightwear -----	1982... \$3 118.0 1977... \$2 836.5 1972... \$1 934.9 1967... \$1 340.5 37 1963... \$1 183.7 38 1963... \$984.5 39 1958... \$776.9	18 16 20 19 18 20 16	27 25 29 29 27 30 24	45 46 48 48 44 (35) (35)	65 65 67 66 62 (35) (35)	178 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
23212	Men's and boys' knit outerwear sport shirts, including sweatshirts (also see code 22532) -----	1982... \$1 112.9 1977... \$809.0 1972... \$390.3 1967... \$129.2 1963... \$83.2 39 1958... \$48.7	23 25 22 31 34 35	38 40 37 46 48 48	62 64 66 69 71 74	87 87 89 93 95 98	264 (NA) (NA) (NA) (NA) (NA) (NA)
23214	Men's and boys' dress and sport shirts, except knit outerwear sport shirts -----	1982... 1 212.1 1977... 1 344.6 1972... 1 043.3 1967... 862.0 1963... 794.4 39 1958... 656.5 39 1954... 634.0	29 26 30 27 23 19 20	42 40 41 39 35 28 29	64 61 63 59 55 46 44	87 79 83 80 74 66 (NA)	431 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
23215	Men's and boys' nightwear (made of woven or purchased knit fabrics), except robes (also see code 22541) -----	1982... \$151.3 1977... \$152.8 1972... \$105.3 1967... \$84.5 1963... \$88.6 39 1958... \$71.7	59 46 44 41 33 35	80 64 59 54 47 53	98 94 83 76 74 78	100 100 99+ 100 98 98	1 094 (NA) (NA) (NA) (NA) (NA) (NA)
23219	Commission work on men's and boys' shirts and nightwear -----	1982... 474.5 1977... 372.6 1972... 340.5 1967... 217.1 1963... 192.9	24 25 19 17 14	37 38 32 28 25	55 52 49 46 42	76 73 71 68 63	277 (NA) (NA) (NA) (NA) (NA)
23210	Men's and boys' shirts and nightwear, n.s.k. -----	1982... 167.1 1977... 157.5 1972... 55.5 1967... 47.7 1963... 18.1	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
23220	Men's and boys' underwear, made from woven or purchased knit fabric (1977 product class 23221) (also see code 22541) -----	1982... \$439.3 1977... \$350.0 1972... \$233.3 1967... \$190.9 1963... \$136.7 39 1958... \$94.5	61 66 49 39 39 31	77 82 69 55 54 47	94 95 90 82 80 76	99+ 100 99+ 99 97 96	1 379 (NA) (NA) (NA) (NA) (NA) (NA)
23230	Men's, youths', and boys' neckwear -----	1982... 310.4 1977... 211.2 1972... 279.4 1967... 128.4 1963... 105.6 39 1958... 89.7 39 1954... 101.3	23 28 26 25 19 17 16	36 40 38 34 27 25 24	56 60 55 51 42 39 40	83 85 76 72 65 61 (NA)	276 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
2327-	Men's and boys' separate trousers -----	1982... 2 107.0 1977... 1 631.4 1972... 1 779.7 1967... 1 195.1 37 1963... 863.4 38 1963... 692.7 39 1958... 436.3 39 1954... 369.1	25 24 25 17 11 14 9 11	39 35 37 27 20 23 16 17	57 53 56 44 34 (35) 30 31	77 71 73 62 51 (35) 50 (NA)	255 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)
23271	Men's and boys' separate dress and sport trousers -----	1982... 1 588.9 1977... 1 308.3 1972... 1 394.1 1967... 931.3 1963... 676.4	30 28 29 18 14	46 39 41 30 24	67 57 61 49 39	89 78 81 70 59	358 (NA) (NA) (NA) (NA) (NA)
23279	Commission work on men's and boys' separate trousers -----	1982... 426.2 1977... 264.5 1972... 332.8 1967... 226.7 1963... 168.0	20 24 23 22 14	32 37 32 29 22	54 59 51 44 35	79 81 84 65 57	209 (NA) (NA) (NA) (NA) (NA)
23270	Men's and boy's separate trousers, n.s.k. -----	1982... 91.8 1977... 58.6 1972... 52.8 1967... 37.2 1963... 16.3	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
2328-	Men's and boys' work clothing -----	1982... 4 022.9 1977... 3 394.1	49 47	57 56	70 70	84 84	931 (NA)

See footnotes at end of table.

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.							
2328-	Men's and boys' work clothing—Con.							
	1972..	1 619.0	40	50	67	82	(NA)	
	1967..	1 023.1	29	41	60	78	(NA)	
	<sup>37</sup> 1963..	717.4	24	37	55	75	(NA)	
	<sup>38</sup> 1963..	635.2	25	36	( <sup>35</sup> )	( <sup>35</sup> )	(NA)	
	<sup>39</sup> 1958..	526.1	15	31	( <sup>35</sup> )	( <sup>35</sup> )	(NA)	
23281	Men's and boys' work shirts -----	1982..	242.5	41	64	86	100	681
	1977..	191.6	36	52	78	99	(NA)	
	1972..	141.7	30	49	78	99	(NA)	
	1967..	121.7	31	45	70	95	(NA)	
	1963..	87.3	23	38	67	92	(NA)	
	<sup>39</sup> 1958..	78.3	29	42	65	88	(NA)	
	<sup>39</sup> 1954..	90.5	(D)	43	67	(NA)	(NA)	
23283	Men's and boys' jeans, including jean-cut casual slacks <sup>11</sup> -----	1982..	2 543.9	67	76	88	97	1 998
	1977..	1 962.8	63	74	87	97	(NA)	
23284	Men's and boys' work clothing and washable service apparel <sup>11</sup> -----	1982..	767.0	28	45	72	94	381
	1977..	729.6	35	50	74	93	(NA)	
23289	Commission work on men's and boys' work clothing -----	1982..	375.9	33	44	63	85	411
	1977..	410.6	41	50	64	83	(NA)	
	1972..	188.4	34	43	59	80	(NA)	
	1967..	138.6	29	46	71	92	(NA)	
	1963..	80.7	32	52	71	91	(NA)	
23280	Men's and boys' work clothing, n.s.k.-----	1982..	93.6	(X)	(X)	(X)	(X)	(X)
	1977..	99.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1972..	22.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1967..	40.6	(X)	(X)	(X)	(X)	(X)	(NA)
	1963..	7.6	(X)	(X)	(X)	(X)	(X)	(NA)
2329-	Men's and boys' clothing, n.e.c.-----	1982..	<sup>51</sup> 377.9	12	20	38	60	96
	1977..	<sup>52</sup> 255.5	12	19	35	56	(NA)	
	1972..	<sup>54</sup> 648.5	17	24	( <sup>35</sup> )	( <sup>35</sup> )	(NA)	
	1967..	<sup>54</sup> 420.0	17	25	38	56	(NA)	
	1963..	<sup>54</sup> 036.6	16	23	36	55	(NA)	
	<sup>39</sup> 1958..	<sup>53</sup> 18.3	14	29	33	51	(NA)	
23291	Men's and boys' heavy outerwear coats and jackets, nontailored....	1982..	449.8	20	35	61	88	244
	1977..	397.3	21	34	57	83	(NA)	
	1972..	311.8	26	36	57	84	(NA)	
	1967..	290.4	21	31	50	76	(NA)	
	1963..	258.7	15	25	43	67	(NA)	
	<sup>39</sup> 1958..	212.7	17	25	42	64	(NA)	
	<sup>39</sup> 1954..	167.8	14	23	28	(NA)	(NA)	
23292	Men's and boys' outerwear, n.e.c. -----	1982..	<sup>57</sup> 70.8	19	32	51	77	192
	1977..	<sup>54</sup> 23.3	14	23	44	72	(NA)	
	1972..	<sup>52</sup> 97.0	21	31	50	72	(NA)	
	1967..	<sup>52</sup> 16.5	25	35	51	74	(NA)	
	1963..	<sup>51</sup> 35.8	26	34	50	70	(NA)	
	<sup>39</sup> 1958..	<sup>50</sup> 0.1	23	33	50	72	(NA)	
23290	Men's and boy's clothing, n.e.c., n.s.k. -----	1982..	157.3	(X)	(X)	(X)	(X)	(X)
	1977..	105.0	(X)	(X)	(X)	(X)	(X)	(NA)
	1972..	39.7	(X)	(X)	(X)	(X)	(X)	(NA)
	1967..	35.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1963..	9.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1958..	15.6	(X)	(X)	(X)	(X)	(X)	(NA)
2331-	Women's and misses' blouses and waists -----	1982..	<sup>54</sup> 258.2	8	13	24	38	40
	1977..	<sup>52</sup> 543.9	8	13	24	40	(NA)	
	1972..	<sup>51</sup> 278.8	10	17	29	45	(NA)	
	1967..	<sup>57</sup> 54.6	11	18	29	46	(NA)	
	<sup>37</sup> 1963..	<sup>56</sup> 99.2	10	15	25	40	(NA)	
	<sup>38</sup> 1963..	<sup>54</sup> 5.3	11	18	( <sup>35</sup> )	( <sup>35</sup> )	(NA)	
	<sup>39</sup> 1958..	<sup>53</sup> 81.4	11	16	( <sup>35</sup> )	( <sup>35</sup> )	(NA)	
23312	Women's, misses', and juniors' knit outerwear sport shirts (also see code 22532) -----	1982..	<sup>56</sup> 78.1	19	32	51	72	181
	1977..	<sup>54</sup> 99.1	19	29	48	75	(NA)	
	1972..	<sup>51</sup> 89.1	32	47	71	89	(NA)	
	1967..	<sup>51</sup> 01.1	40	52	77	97	(NA)	
	1963..	<sup>55</sup> 8.4	32	47	73	95	(NA)	
	<sup>39</sup> 1958..	<sup>53</sup> 4.1	45	65	92	100	(NA)	
23317	Women's, misses', and juniors' woven blouses, waists, shirts -----	1982..	2 533.9	12	18	31	51	75
	1977..	1 421.7	14	21	35	56	(NA)	
	1972..	713.6	14	22	37	59	(NA)	
	1967..	426.2	16	25	41	63	(NA)	
	1963..	442.0	13	20	35	56	(NA)	
	1958..	347.3	12	18	28	44	(NA)	
	1954..	315.7	12	17	27	(NA)	(NA)	
23319	Contract and commission work on women's, misses', and juniors' blouses and shirts-----	1982..	713.4	9	14	23	37	41
	1977..	487.7	10	15	25	39	(NA)	
	1972..	268.5	18	26	36	49	(NA)	
	1967..	152.8	14	22	33	47	(NA)	
	1963..	153.9	10	14	23	38	(NA)	
23310	Women's and misses' blouses, waists, and shirts, n.s.k. -----	1982..	332.7	(X)	(X)	(X)	(X)	(X)
	1977..	135.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1972..	107.6	(X)	(X)	(X)	(X)	(X)	(NA)
	1967..	74.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1963..	44.8	(X)	(X)	(X)	(X)	(X)	(NA)
2335-	Women's and misses' dresses -----	1982..	4 534.7	6	9	16	27	20

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.						
2335-	Women's and misses' dresses—Con.						
	1977--	4 132.8	7	10	17	26	(NA)
	1972--	3 536.2	9	13	18	27	(NA)
	1967--	3 068.0	7	10	15	24	(NA)
	<sup>37</sup> 1963--	2 385.1	7	9	14	23	(NA)
	<sup>38</sup> 1963--	1 961.8	8	10	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	<sup>39</sup> 1958--	1 624.8	4	7	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
23353	Women's, misses', and juniors' dresses <sup>42</sup> -----	1982--	2 988.6	8	13	22	37
23359	Commission work on women's, misses', and juniors' dresses-----	1982--	1 029.1	9	12	19	28
	1977--	694.5	7	11	18	29	(NA)
	1972--	729.7	7	11	17	26	(NA)
	1967--	538.0	5	7	12	20	(NA)
	1963--	423.3	4	7	12	19	(NA)
23350	Women's, misses', and juniors' dresses, n.s.k.-----	1982--	517.0	(X)	(X)	(X)	(X)
	1977--	1 041.5	(X)	(X)	(X)	(X)	(NA)
	1972--	600.6	(X)	(X)	(X)	(X)	(NA)
	1967--	411.3	(X)	(X)	(X)	(X)	(NA)
	1963--	233.9	(X)	(X)	(X)	(X)	(NA)
2337-	Women's and misses' suits and coats-----	1982--	4 288.9	14	20	30	43
	1977--	2 725.6	11	15	24	37	(NA)
	1972--	1 725.3	7	11	19	31	(NA)
	1967--	1 648.0	8	10	17	28	(NA)
	<sup>37</sup> 1963--	1 444.7	4	6	12	23	(NA)
	<sup>38</sup> 1963--	1 256.4	4	7	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	<sup>39</sup> 1958--	1 034.0	3	5	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
23371	Women's, misses', and juniors' coats (except fur and leather)-----	1982--	621.9	15	25	45	74
	1977--	612.1	14	23	42	69	(NA)
	1972--	570.1	10	16	33	56	(NA)
	1967--	606.6	11	17	28	47	(NA)
	1963--	542.9	6	11	21	39	(NA)
	<sup>39</sup> 1958--	490.1	6	10	20	37	(NA)
	<sup>39</sup> 1954--	509.4	6	10	19	(NA)	(NA)
23372	Women's, misses', and juniors' suits-----	1982--	407.1	22	34	60	84
	1977--	665.3	22	33	51	73	(NA)
	1972--	313.2	11	19	37	63	(NA)
	1967--	189.2	14	23	39	64	(NA)
	1963--	211.5	12	20	34	56	(NA)
	<sup>39</sup> 1958--	186.1	9	15	29	53	(NA)
	<sup>39</sup> 1954--	245.6	10	17	30	(NA)	(NA)
23374	Women's, misses', and juniors' skirts and jackets-----	1982--	2 351.2	23	32	48	65
	1977--	738.3	21	29	43	64	(NA)
	1972--	443.5	20	31	48	72	(NA)
	1967--	469.9	18	24	39	60	(NA)
	1963--	374.4	13	20	34	54	(NA)
	<sup>39</sup> 1958--	311.2	9	15	27	46	(NA)
23379	Commission work on women's, misses', and juniors' coats, suits, and skirts-----	1982--	513.7	10	14	23	39
	1977--	423.9	14	18	26	38	(NA)
	1972--	282.7	6	9	17	28	(NA)
	1967--	222.8	4	8	13	24	(NA)
	1963--	188.3	4	7	12	22	(NA)
23370	Women's and misses' suits and coats, n.s.k.-----	1982--	395.1	(X)	(X)	(X)	(X)
	1977--	285.9	(X)	(X)	(X)	(X)	(NA)
	1972--	115.8	(X)	(X)	(X)	(X)	(NA)
	1967--	159.5	(X)	(X)	(X)	(X)	(NA)
	1963--	127.6	(X)	(X)	(X)	(X)	(NA)
	<sup>39</sup> 1958--	46.6	(X)	(X)	(X)	(X)	(NA)
	<sup>39</sup> 1954--	73.6	(X)	(X)	(X)	(X)	(NA)
2339-	Women's and misses' outerwear, n.e.c.-----	1982--	<sup>55</sup> 159.5	15	24	34	47
	1977--	<sup>53</sup> 166.9	14	19	29	44	(NA)
	1972--	<sup>51</sup> 648.1	14	23	34	49	(NA)
	1967--	<sup>58</sup> 57.2	13	18	29	44	(NA)
	<sup>37</sup> 1963--	<sup>57</sup> 63.3	11	16	26	41	(NA)
	<sup>38</sup> 1963--	<sup>56</sup> 62.6	12	18	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	<sup>39</sup> 1958--	<sup>54</sup> 20.7	10	15	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
23392	Women's, misses', and juniors' washable service apparel-----	1982--	250.4	32	48	77	98
	1977--	193.2	33	51	82	99	(NA)
	1972--	105.2	36	55	82	99	(NA)
	1967--	121.2	23	36	62	91	(NA)
	1963--	98.9	24	35	58	83	(NA)
	1958--	91.7	22	33	52	76	(NA)
	1954--	56.6	20	30	50	(NA)	(NA)
23394	Women's, misses', and juniors' swimsuits <sup>11</sup> -----	1982--	<sup>5</sup> 387.1	33	52	84	99
	1977--	<sup>5</sup> 163.8	42	58	85	99	(NA)
23395	Women's, misses', and juniors' slacks <sup>11</sup> -----	1982--	<sup>52</sup> 591.2	26	37	53	71
	1977--	<sup>51</sup> 460.1	21	29	45	69	(NA)
23397	Women's, misses', and juniors' other outerwear, n.e.c. <sup>11</sup> -----	1982--	<sup>56</sup> 43.7	13	22	41	65
	1977--	<sup>54</sup> 58.1	18	28	48	76	(NA)
23399	Commission work on women's, misses', and juniors' outerwear, n.e.c.-----	1982--	780.9	18	26	36	50
	1977--	501.1	15	22	32	48	(NA)
	1972--	304.8	13	18	27	40	(NA)
	1967--	124.6	8	13	24	43	(NA)
	1963--	100.7	8	13	24	41	(NA)

See footnotes at end of table.

Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.						
2339- 23390	Women's and misses' outerwear, n.e.c.—Con. Women's, and misses', outerwear, n.e.c., n.s.k.-----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	506.3 390.6 98.7 89.3 75.8 22.9	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2341-	Women's and children's underwear-----	1982-- 1977-- 1972-- 1967-- 37 1963-- 38 1963-- 39 1958--	52 356.3 51 750.0 51 288.7 51 071.8 59 41.4 58 34.2 57 14.2	19 20 14 14 10 9 8	26 28 22 21 16 16 14	40 42 40 36 29 (35) (35)	62 63 60 54 47 (35) (35)
23412	Women's, misses', children's, and infants' underwear (also see code 22542)-----	1982-- 1977-- 1972-- 1967-- 1963-- 39 1958--	58 32.7 58 5.8 54 16.7 54 87.1 54 62.3 54 54.2	23 19 23 18 21 12	34 30 35 26 43 19	56 52 55 43 38 33	83 77 82 68 60 52
23413	Women's, misses', children's, and infants' nightwear (also see code 22543)-----	1982-- 1977-- 1972-- 1967-- 1963-- 39 1958--	51 136.0 58 52.2 59 7.5 58 0.2 53 50.0 52 41.2	18 21 16 14 12 12	27 31 26 26 19 19	49 52 49 48 33 34	77 76 76 70 56 57
23419	Commission work on women's and children's underwear and nightwear-----	1982-- 1977-- 1972-- 1967-- 1963--	314.5 247.1 186.4 126.6 107.2	34 38 18 27 21	44 50 28 39 31	62 67 46 56 49	82 86 72 76 69
23410	Women's and children's underwear and nightwear, n.s.k.-----	1982-- 1977-- 1972-- 1967-- 1963-- 39 1958--	83.3 64.9 88.1 77.9 22.0 18.8	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2342-	Brassieres and allied garments-----	1982-- 1977-- 1972-- 1967-- 37 1963-- 38 1963-- 39 1958--	666.7 546.6 679.5 600.5 565.9 532.0 412.3	30 34 35 24 26 26 28	50 49 46 37 41 40 41	76 75 68 59 61 (35) (35)	93 91 86 79 79 (35) (35)
23421	Brassieres, bralettes, and bandeaux-----	1982-- 1977-- 1972-- 1967-- 1963-- 39 1958-- 39 1954--	450.8 346.1 385.1 261.3 258.8 220.0 189.9	40 43 43 31 32 34 34	62 62 59 49 50 51 49	90 88 83 72 72 70 69	100 99 + 98 94 92 89 (NA)
23422	Corsets, girdles, combinations, and accessories-----	1982-- 1977-- 1972-- 1967-- 1963-- 39 1958--	159.1 153.3 236.6 279.5 238.4 182.8	39 33 31 24 24 28	56 50 41 36 37 40	82 78 65 61 59 58	99 + 99 90 88 84 82
23429	Commission work on brassieres, corsets, and allied garments-----	1982-- 1977-- 1972-- 1967-- 1963--	19.8 23.6 38.5 38.1 33.9	66 59 35 40 47	88 80 52 57 66	100 100 85 81 88	(X) (X) 100 99 100
23420	Brassieres, corsets, and allied garments, n.s.k.-----	1982-- 1977-- 1972-- 1967-- 1963-- 39 1958--	37.1 23.6 19.1 21.6 7.9 9.5	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
23510	Millinery, all types-----	1982-- 1977-- 1972-- 1967-- 1963-- 39 1958-- 39 1954--	87.7 74.2 58.9 111.1 159.5 186.9 170.2	23 19 17 12 9 6 7	35 28 25 17 14 10 12	57 48 43 27 22 19 20	88 78 67 45 37 32 (NA)
2352-	Hats and caps, except millinery-----	1982-- 1977-- 1972-- 1967-- 1963--	416.8 270.4 147.6 180.0 160.7	24 28 25 31 32	38 42 37 41 42	56 62 56 57 53	77 82 75 74 70

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.						
2352-	Hats and caps, except millinery—Con.						
	<sup>39</sup> 1958..	156.6	29	38	50	66	(NA)
23521	Hats and hat bodies, except cloth and millinery -----						
	1982..	83.2	76	90	100	(X)	2 041
	1977..	66.4	61	78	95	100	(NA)
	1972..	44.5	53	75	95	100	(NA)
	1967..	66.9	63	78	94	100	(NA)
	1963..	83.9	58	74	88	99	(NA)
	<sup>39</sup> 1958..	92.2	49	63	80	95	(NA)
23522	Cloth hats and caps -----						
	1982..	272.0	29	44	65	89	346
	1977..	176.6	31	46	70	92	(NA)
	1972..	84.0	23	38	61	86	(NA)
	1967..	98.7	22	36	55	78	(NA)
	1963..	68.9	12	20	39	66	(NA)
	<sup>39</sup> 1958..	64.4	11	18	32	55	(NA)
	<sup>39</sup> 1954..	62.9	11	17	31	(NA)	(NA)
23520	Hats and caps, except millinery, n.s.k. -----						
	1982..	61.6	(X)	(X)	(X)	(X)	(X)
	1977..	27.4	(X)	(X)	(X)	(X)	(NA)
	1972..	19.1	(X)	(X)	(X)	(X)	(NA)
	1967..	14.4	(X)	(X)	(X)	(X)	(NA)
	1963..	7.9	(X)	(X)	(X)	(X)	(NA)
2361-	Children's dresses and blouses -----						
	1982..	1 443.2	18	24	39	61	160
	1977..	839.1	14	21	37	59	(NA)
	1972..	654.7	14	22	37	58	(NA)
	1967..	522.0	12	19	31	51	(NA)
	<sup>37</sup> 1963..	450.2	12	18	32	50	(NA)
	<sup>38</sup> 1963..	388.8	12	20	(35)	(35)	(NA)
	<sup>39</sup> 1958..	308.4	13	21	(35)	(35)	(NA)
23611	Girls', children's, and infants' dresses and shirts <sup>43</sup> -----						
	1982..	755.4	15	25	46	74	143
23612	Girls', children's, and infants' knit sport shirts (also see code 22532) -----						
	1982..	<sup>54</sup> 401.7	49	62	86	99+	1 213
	1977..	<sup>51</sup> 176.1	55	73	95	100	(NA)
	1972..	<sup>51</sup> 115.3	46	63	89	100	(NA)
	1967..	<sup>55</sup> 5.1	47	69	94	100	(NA)
	1963..	<sup>54</sup> 3.0	38	56	83	100	(NA)
	<sup>39</sup> 1958..	<sup>51</sup> 9.0	31	53	85	100	(NA)
23619	Commission work on children's dresses and blouses -----						
	1982..	208.7	14	24	43	68	128
	1977..	134.5	17	27	49	70	(NA)
	1972..	104.5	18	26	42	62	(NA)
	1967..	80.6	15	23	38	58	(NA)
	1963..	61.4	17	26	40	62	(NA)
23610	Children's and infants' dresses and blouses, n.s.k. <sup>43</sup> -----						
	1982..	77.4	(X)	(X)	(X)	(X)	(X)
2363-	Children's coats and suits -----						
	1982..	211.4	36	54	79	95	497
	1977..	191.5	21	35	61	86	(NA)
	1972..	199.8	17	28	50	78	(NA)
	1967..	190.6	16	26	46	71	(NA)
	<sup>37</sup> 1963..	172.4	13	20	38	61	(NA)
	<sup>38</sup> 1963..	148.7	14	23	42	67	(NA)
23631	Girls', children's, and infants' coats, jackets, suits, snowsuits, and coat-and-legging sets <sup>44</sup> -----						
	1982..	171.5	41	63	92	100	665
23639	Commission work on girls', children's, and infants' coats and suits -----						
	1982..	32.4	48	62	87	100	773
	1977..	17.9	27	46	76	100	(NA)
	1972..	27.3	27	39	64	92	(NA)
	1967..	22.0	29	44	64	89	(NA)
	1963..	23.7	16	28	56	83	(NA)
23630	Girls' coats and suits, n.s.k. <sup>44</sup> -----						
	1982..	7.4	(X)	(X)	(X)	(X)	(X)
2369-	Children's outerwear, n.e.c. -----						
	1982..	1 195.8	26	36	52	74	303
	1977..	765.9	20	31	48	69	(NA)
	1972..	623.1	16	25	40	60	(NA)
	1967..	450.8	15	23	37	56	(NA)
	<sup>37</sup> 1963..	402.2	12	19	31	47	(NA)
	<sup>38</sup> 1963..	356.8	13	20	33	51	(NA)
23691	Girls', children's, and infants' outerwear, n.e.c. <sup>45</sup> -----						
	1982..	1 012.1	30	41	58	83	400
23699	Commission work on children's outerwear, n.e.c. -----						
	1982..	123.2	22	34	58	85	236
	1977..	80.0	22	37	62	86	(NA)
	1972..	77.6	19	30	49	72	(NA)
	1967..	57.1	19	29	50	75	(NA)
	1963..	45.4	17	26	44	69	(NA)
23690	Children's outerwear, n.e.c., n.s.k. <sup>45</sup> -----						
	1982..	60.5	(X)	(X)	(X)	(X)	(X)
23710	Fur goods -----						
	1982..	397.9	12	19	33	56	86
	1977..	358.5	12	20	33	52	(NA)
	1972..	213.7	7	12	23	39	(NA)
	1967..	322.6	5	8	15	27	(NA)
	1963..	321.4	4	7	14	26	(NA)
	<sup>39</sup> 1958..	267.2	6	9	16	27	(NA)
	<sup>39</sup> 1954..	215.5	4	6	11	(NA)	(NA)
2381-	Fabric dress and work gloves -----						
	1982..	<sup>52</sup> 206.6	41	62	81	95	679
	1977..	<sup>52</sup> 278.3	40	60	78	93	(NA)
	1972..	<sup>51</sup> 172.9	42	58	78	93	(NA)
	1967..	<sup>51</sup> 138.3	38	50	74	92	(NA)
	1963..	<sup>51</sup> 130.9	30	45	70	87	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.						
2381-	Fabric dress and work gloves—Con.	<sup>39</sup> 1958.. \$109.0	30	46	70	85	(NA)
23811	Dress and semidress gloves and mittens .....	1982.. (D)	68	90	100	(X)	1 779
		1977.. \$16.1	75	92	100	(X)	(NA)
		1972.. \$10.7	66	90	100	(X)	(NA)
		1967.. \$22.2	52	77	98	100	(NA)
		1963.. \$37.2	47	66	87	99	(NA)
		<sup>39</sup> 1958.. \$37.6	43	59	79	95	(NA)
23812	Work gloves and mittens.....	1982.. (D)	48	68	89	99+	834
		1977.. \$246.2	43	64	83	98	(NA)
		1972.. \$148.6	47	65	86	99	(NA)
		1967.. \$110.5	46	63	86	99	(NA)
		1963.. \$88.3	44	64	82	96	(NA)
		<sup>39</sup> 1958.. \$71.4	44	65	81	94	(NA)
23810	Fabric dress and work gloves, n.s.k. ....	1982.. 11.6	(X)	(X)	(X)	(D)	(X)
		1977.. 16.0	(X)	(X)	(X)	(X)	(NA)
		1972.. 13.6	(X)	(X)	(X)	(X)	(NA)
		1967.. 5.6	(X)	(X)	(X)	(X)	(NA)
		<sup>39</sup> 1963.. 5.5	(X)	(X)	(X)	(X)	(NA)
23840	Robes and dressing gowns, except children's .....	1982.. 416.0	23	38	64	92	279
		1977.. 243.3	27	44	70	94	(NA)
		1972.. 166.2	24	41	64	90	(NA)
		1967.. 178.4	17	28	51	82	(NA)
		1963.. 160.1	16	27	49	79	(NA)
		<sup>39</sup> 1958.. 116.1	14	24	44	72	(NA)
23851	Raincoats and other waterproof outerwear (1977 product class 23850) .....	1982.. 357.0	48	64	86	98	1 016
		1977.. 313.1	34	46	68	90	(NA)
		1972.. 291.2	33	43	60	83	(NA)
		1967.. 327.8	25	36	55	77	(NA)
		1963.. 202.8	21	29	48	72	(NA)
		<sup>39</sup> 1958.. 128.3	19	28	51	76	(NA)
		<sup>39</sup> 1954.. 116.6	19	29	50	(NA)	(NA)
23860	Leather and sheep lined clothing .....	1982.. 207.3	30	45	67	87	372
		1977.. 210.6	15	27	50	79	(NA)
		1972.. 173.6	16	29	54	79	(NA)
		1967.. 102.1	23	36	61	88	(NA)
		1963.. 58.4	24	39	62	90	(NA)
		<sup>39</sup> 1958.. 62.7	17	29	51	82	(NA)
		<sup>39</sup> 1954.. 56.7	18	30	50	(NA)	(NA)
2387-	Apparel belts .....	1982.. 474.2	16	25	43	65	138
		1977.. 244.3	19	29	45	67	(NA)
		1972.. 234.0	22	31	48	72	(NA)
		1967.. 109.1	22	32	48	69	(NA)
		1963.. 92.4	16	24	38	58	(NA)
		<sup>39</sup> 1958.. 82.0	21	27	39	57	(NA)
		<sup>39</sup> 1954.. 95.0	19	26	38	(NA)	(NA)
23871	Belts, leather .....	1982.. 261.5	24	34	55	83	286
		1977.. 155.5	27	42	64	87	(NA)
		1972.. 157.9	31	44	67	91	(NA)
		1967.. 64.3	33	50	70	93	(NA)
		1963.. 47.0	29	42	61	83	(NA)
		<sup>39</sup> 1958.. 48.1	31	41	57	79	(NA)
		<sup>39</sup> 1954.. 52.7	29	37	53	(NA)	(NA)
23872	Belts, other than leather .....	1982.. 164.7	21	32	54	82	218
		1977.. 58.2	22	33	53	85	(NA)
		1972.. 46.9	24	39	61	91	(NA)
		1967.. 26.6	20	31	54	86	(NA)
		1963.. 32.5	15	25	44	73	(NA)
		<sup>39</sup> 1958.. 27.5	13	23	43	67	(NA)
		<sup>39</sup> 1954.. 35.4	19	30	46	(NA)	(NA)
23870	Apparel belts, n.s.k. ....	1982.. 48.0	(X)	(X)	(X)	(X)	(X)
		1977.. 30.6	(X)	(X)	(X)	(X)	(NA)
		1972.. 29.2	(X)	(X)	(X)	(X)	(NA)
		1967.. 18.2	(X)	(X)	(X)	(X)	(NA)
		1963.. 12.8	(X)	(X)	(X)	(X)	(NA)
		<sup>39</sup> 1958.. 6.4	(X)	(X)	(X)	(X)	(NA)
23890	Apparel and accessories, n.e.c. ....	1982.. 243.2	25	36	51	71	230
		1977.. 175.7	28	41	59	76	(NA)
		1972.. 123.2	23	33	53	75	(NA)
		1967.. 121.2	17	27	49	73	(NA)
		1963.. 103.1	17	27	46	71	(NA)
		<sup>39</sup> 1958.. 92.1	13	22	41	65	(NA)
23910	Curtains and draperies, except lace .....	1982.. 1 008.3	20	32	45	59	170
		1977.. 936.7	25	35	47	59	(NA)
		1972.. 631.6	29	36	46	58	(NA)
		1967.. 374.9	28	39	50	63	(NA)
		1963.. 278.3	21	33	45	61	(NA)
		1958.. 198.7	27	35	45	61	(NA)
		1954.. 167.6	21	29	43	(NA)	(NA)
2392-	House furnishings, n.e.c. ....	1982.. \$3 299.3	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1977.. \$2 202.3	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1972.. \$1 445.2	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1967.. \$941.4	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1963.. ( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.						
2392-	House furnishings, n.e.c.—Con.						
	1958..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
23921	Bedspreads and bedsets, not made in a weaving mill (1977 product class 23926) (also see codes 2211A and 2221A) -----						
	1982..	<sup>5</sup> 331.4	28	44	72	93	354
	1977..	<sup>5</sup> 300.4	29	45	71	92	(NA)
	1972..	<sup>5</sup> 261.6	31	44	66	90	(NA)
	1967..	<sup>5</sup> 173.8	37	51	69	91	(NA)
	1963..	<sup>5</sup> 111.9	28	41	62	86	(NA)
	1958..	<sup>5</sup> 83.5	35	47	64	85	(NA)
23922	Sheets and pillowcases, not made in a weaving mill (1977 product class 23928) (also see code 22219) -----						
	1982..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1977..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1972..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1967..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1958..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
23923	Towels and washcloths not made in a weaving mill (1977 product class 23929) (also see code 22119) -----						
	1982..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1977..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1972..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1967..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
	1958..	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
23924	Other housefurnishings not made in a wearing mill (also see codes 2211A, 2221A, and 22319) <sup>46</sup> -----						
	1982..	<sup>5</sup> 1 477.6	18	28	47	70	160
23920	House furnishings, n.e.c., n.s.k. <sup>46</sup> -----						
	1982..	456.8	(X)	(X)	(X)	(X)	(X)
23930	Textile bags, except laundry, wardrobe and shoe -----						
	1982..	409.3	16	24	40	65	131
	1977..	277.8	20	30	49	76	(NA)
	1972..	230.6	24	38	58	79	(NA)
	1967..	277.9	31	48	67	86	(NA)
	1963..	181.9	39	48	64	83	(NA)
	1958..	174.9	39	51	66	82	(NA)
	1954..	210.2	44	55	69	(NA)	(NA)
23940	Canvas and related products -----						
	1982..	690.9	20	26	37	48	166
	1977..	465.6	17	26	40	54	(NA)
	1972..	271.4	21	27	37	52	(NA)
	1967..	254.3	20	30	42	60	(NA)
	1963..	153.5	16	22	34	50	(NA)
	1958..	114.2	14	22	32	47	(NA)
	1954..	124.0	13	18	30	(NA)	(NA)
2395-	Pleating and stitching -----						
	1982..	<sup>35</sup> 799.7	24	33	( <sup>35</sup> )	( <sup>35</sup> )	219
	1977..	<sup>35</sup> 516.5	26	36	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	1972..	277.4	19	28	43	59	(NA)
	1967..	<sup>35</sup> 77.6	11	20	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	1963..	<sup>35</sup> 77.7	3	6	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
23951	Embroideries (except Schiffli machine products), stamped art goods and art needlework -----						
	1982..	608.4	35	49	68	83	458
	1977..	390.3	38	53	71	89	(NA)
	1972..	148.3	33	50	75	93	(NA)
	1967..	37.9	(S)	(S)	(S)	(S)	(NA)
	1963..	46.0	14	21	38	64	(NA)
23950	Pleating and stitching, n.s.k. -----						
	1982..	191.3	(X)	(X)	(X)	(X)	(X)
	1977..	126.2	(X)	(X)	(X)	(X)	(NA)
	1972..	68.1	(X)	(X)	(X)	(X)	(NA)
	1967..	39.7	(X)	(X)	(X)	(X)	(NA)
	1963..	31.6	(X)	(X)	(X)	(X)	(NA)
2396-	Automotive and apparel trimmings -----						
	1982..	2 083.0	(D)	71	78	84	1 808
	1977..	2 191.1	74	79	84	89	(NA)
	1972..	1 146.6	70	76	81	87	(NA)
	<sup>47</sup> 1967..	797.0	60	66	71	79	(NA)
	1963..	556.3	58	63	71	79	(NA)
23961	Men's and boys' suit and coat findings -----						
	1982..	183.5	69	81	94	100	2 077
	1977..	104.4	59	74	93	100	(NA)
	1972..	94.5	52	63	85	99	(NA)
	<sup>47</sup> 1967..	55.8	31	48	76	98	(NA)
	1963..	45.0	25	39	63	87	(NA)
23962	Automobile trimmings -----						
	1982..	1 384.3	(D)	97	99+	100	(D)
	1977..	1 737.7	93	97	99+	100	(NA)
	1972..	823.1	95	98	99+	100	(NA)
	1967..	513.4	93	97	99	100	(NA)
	1963..	360.2	90	97	99	99+	(NA)
23963	Other trimmings and findings -----						
	1982..	282.5	34	46	64	83	456
	1977..	187.4	27	38	57	81	(NA)
	1972..	146.5	35	43	59	78	(NA)
	1967..	192.5	20	26	40	60	(NA)
	1963..	127.4	16	24	40	60	(NA)
23960	Automotive and apparel trimmings, n.s.k. -----						
	1982..	232.6	(X)	(X)	(X)	(X)	(X)
	1977..	161.6	(X)	(X)	(X)	(X)	(NA)
	1972..	82.3	(X)	(X)	(X)	(X)	(NA)
	1967..	35.3	(X)	(X)	(X)	(X)	(NA)
	1963..	23.8	(X)	(X)	(X)	(X)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
23	APPAREL AND OTHER TEXTILE PRODUCTS—Con.						
23970	Schiffli machine embroideries ----- 1982__	263.7	23	33	50	70	200
	1977__	146.3	24	35	50	68	(NA)
	1972__	99.1	20	30	45	62	(NA)
	1967__	<sup>48</sup> 83.5	15	22	36	55	(NA)
	1963__	<sup>48</sup> 73.0	18	27	40	58	(NA)
	1958__	<sup>48</sup> 62.3	14	21	33	49	(NA)
	1954__	<sup>48</sup> 49.8	19	28	40	(NA)	(NA)
23990	Fabricated textile products, n.e.c. (also see code 2211A) ----- 1982__	<sup>51</sup> 458.1	17	29	48	65	156
	1977__	<sup>51</sup> 158.9	26	36	48	64	(NA)
	1972__	<sup>57</sup> 25.7	22	34	49	66	(NA)
	1967__	<sup>55</sup> 29.3	19	30	49	67	(NA)
	1963__	<sup>53</sup> 53.8	14	22	39	55	(NA)
	1958__	<sup>52</sup> 57.3	14	24	39	53	(NA)
24	LUMBER AND WOOD PRODUCTS						
2411-	Logging products and contract logging ----- 1982__	7 448.4	23	31	40	46	218
	1977__	5 757.5	23	30	39	44	(NA)
	1972__	2 612.9	20	27	35	40	(NA)
	1967__	<sup>35</sup> 1 515.2	16	24	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	1963__	<sup>35</sup> 1 185.6	18	26	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
24111	Softwood logs, bolts, and timber <sup>11</sup> ----- 1982__	3 083.2	47	60	77	86	1 007
	1977__	2 580.7	47	61	78	86	(NA)
24112	Hardwood logs, bolts, and timber <sup>11</sup> ----- 1982__	257.5	19	27	40	57	155
	1977__	241.8	15	25	40	54	(NA)
24113	Pulpwood <sup>11</sup> ----- 1982__	624.6	51	67	78	86	794
	1977__	383.2	32	47	61	71	(NA)
24114	Other roundwood products <sup>11</sup> ----- 1982__	327.2	29	39	55	71	309
	1977__	71.3	34	45	63	83	(NA)
24119	Receipts for contract logging ----- 1982__	780.2	8	13	20	31	32
	1977__	757.5	5	8	15	25	(NA)
	1972__	404.1	9	12	19	31	(NA)
	1967__	270.4	(NA)	(NA)	(NA)	(NA)	(NA)
	1963__	336.3	(NA)	(NA)	(NA)	(NA)	(NA)
24110	Logging products and contract logging, n.s.k. <sup>11</sup> ----- 1982__	2 375.7	(X)	(X)	(X)	(X)	(X)
	1977__	1 722.9	(X)	(X)	(X)	(X)	(NA)
2421-	Sawmill and planing mill products ----- 1982__	9 966.2	17	24	34	46	116
	1977__	10 465.7	18	24	36	48	(NA)
	1972__	5 999.9	17	22	32	43	(NA)
	1967__	3 288.0	10	14	21	30	(NA)
	1963__	<sup>35</sup> 2 742.9	10	13	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
24211	Hardwood lumber, rough and dressed (except siding) <sup>49</sup> ----- 1982__	1 053.5	11	15	23	35	47
	1977__	972.9	10	15	24	36	(NA)
	1972__	516.3	14	19	31	45	(NA)
24212	Softwood lumber, rough and dressed (except siding) <sup>49</sup> ----- 1982__	5 202.5	22	30	45	60	180
	1977__	6 899.7	21	29	45	61	(NA)
	1972__	3 907.8	20	27	40	55	(NA)
24215	Wood chips, except field chips ----- 1982__	1 687.6	33	42	56	71	432
	1977__	1 079.5	32	43	55	66	(NA)
	1972__	505.5	40	48	57	67	(NA)
	1967__	188.1	18	23	32	44	(NA)
24217	Softwood cut stock ----- 1982__	259.9	24	37	64	90	279
	1977__	229.5	20	35	64	90	(NA)
	1972__	155.8	(S)	(S)	(S)	(S)	(NA)
	1967__	84.9	23	37	60	83	(NA)
	1963__	87.9	22	34	55	77	(NA)
	1958__	56.3	20	33	57	82	(NA)
24218	Softwood flooring, siding, and other general sawmill and planing mill products <sup>49</sup> ----- 1982__	141.1	20	31	53	79	239
	1977__	125.2	16	26	44	67	(NA)
	1972__	133.0	14	22	36	60	(NA)
	1967__	54.5	16	24	41	64	(NA)
	1963__	57.4	16	23	34	50	(NA)
24219	Custom sawing receipts from contract or custom sawing, kiln drying, and planing of lumber or logs owned by others ----- 1982__	77.2	20	29	47	73	180
	1977__	90.7	34	43	56	75	(NA)
	1972__	41.0	35	42	57	80	(NA)
	1967__	31.3	18	26	44	66	(NA)
24210	Sawmills and planing mill products, n.s.k. ----- 1982__	1 544.4	(X)	(X)	(X)	(X)	(X)
	1977__	1 068.2	(X)	(X)	(X)	(X)	(NA)
	1972__	740.4	(X)	(X)	(X)	(X)	(NA)
	1967__	524.2	(X)	(X)	(X)	(X)	(NA)
	1963__	199.5	(X)	(X)	(X)	(X)	(NA)
2426-	Hardwood dimension and flooring <sup>50</sup> ----- 1982__	872.5	11	16	28	44	64
	1977__	807.5	14	19	31	46	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
24	LUMBER AND WOOD PRODUCTS—Con.						
2426-	Hardwood dimension and flooring <sup>50</sup> —Con.						
	1972..	571.8	11	17	26	41	(NA)
24261	Hardwood flooring.....	1982.. 187.9	42	58	80	99+	751
		1977.. 159.6	46	61	84	100	(NA)
		1972.. 118.4	32	41	62	92	(NA)
		1967.. 129.2	29	37	55	78	(NA)
		1963.. 154.2	25	34	49	71	(NA)
		1958.. 148.4	17	24	40	62	(NA)
24262	Hardwood dimension stock, furniture parts, and vehicle stock .....	1982.. 452.7	13	20	34	56	92
		1977.. 451.1	15	22	36	57	(NA)
		1972.. 304.6	15	22	36	56	(NA)
		1967.. 216.7	9	16	30	51	(NA)
		1963.. 169.8	8	14	27	47	(NA)
24266	Wood frames for household furniture .....	1982.. 130.8	25	39	58	81	263
		1977.. 104.1	24	35	51	75	(NA)
		1972.. 77.1	24	33	50	74	(NA)
		1967.. 52.4	19	30	49	72	(NA)
		1963.. 53.4	16	25	37	55	(NA)
		1958.. 36.5	13	18	29	48	(NA)
24260	Hardwood dimension and flooring, n.s.k. ....	1982.. 101.1	(X)	(X)	(X)	(X)	(X)
		1977.. 92.6	(X)	(X)	(X)	(X)	(NA)
		1972.. 71.8	(X)	(X)	(X)	(X)	(NA)
		1967.. 24.3	(X)	(X)	(X)	(X)	(NA)
24290	Shingles, shakes, cooperage stock, and excelsior .....	1982.. 149.9	20	29	47	70	172
		1977.. 258.7	12	19	35	56	(NA)
		1972.. 173.6	(S)	(S)	(S)	(S)	(NA)
		1967.. 115.6	21	31	43	61	(NA)
		1963.. 51 177.3	12	18	28	42	(NA)
2431-	Millwork <sup>52</sup> .....	1982.. 3 988.4	14	19	29	43	99
		1977.. 3 693.3	13	19	30	45	(NA)
		1972.. 2 229.2	9	14	24	39	(NA)
24311	Wood window units.....	1982.. 692.1	61	74	87	96	1 866
		1977.. 609.3	57	69	84	95	(NA)
		1972.. 279.3	50	64	80	93	(NA)
		1967.. 149.6	47	57	73	87	(NA)
		1963.. 119.1	41	51	65	81	(NA)
24312	Wood window sash.....	1982.. 60.6	56	70	86	98	935
		1977.. 95.4	48	65	84	97	(NA)
		1972.. 60.7	36	51	74	95	(NA)
		1967.. 39.8	21	33	60	88	(NA)
		1963.. 40.4	18	29	54	80	(NA)
24313	Wood window and door frames .....	1982.. 190.2	31	50	73	88	392
		1977.. 264.6	27	44	67	85	(NA)
		1972.. 147.0	20	30	52	78	(NA)
		1967.. 56.6	20	30	51	76	(NA)
		1963.. 68.5	17	26	46	72	(NA)
24314	Wood doors, interior and exterior .....	1982.. 775.5	18	32	53	76	185
		1977.. 707.5	21	33	51	72	(NA)
		1972.. 527.6	16	26	46	69	(NA)
		1967.. 287.5	15	24	42	70	(NA)
		1963.. 254.9	11	20	41	69	(NA)
24315	Other wood doors, including garage, screen, etc. ....	1982.. 480.4	23	34	56	80	250
		1977.. 479.1	30	43	61	82	(NA)
		1972.. 193.2	26	35	56	81	(NA)
		1967.. 117.4	27	37	56	79	(NA)
		1963.. 127.9	20	30	51	73	(NA)
24316	Wood moldings (standard) except prefinished moldings made from purchased moldings <sup>53</sup> .....	1982.. 507.9	21	34	56	80	225
		1977.. 569.1	20	31	52	73	(NA)
		1972.. 406.4	19	29	51	73	(NA)
		1967.. 195.7	15	23	39	63	(NA)
		1963.. 166.6	10	17	32	54	(NA)
		1958.. 148.1	10	17	31	51	(NA)
24317	Prefinished wood moldings, made from purchased moldings <sup>53</sup> .....	1982.. 99.1	54	73	92	99+	1 000
		1977.. 75.0	46	63	90	99	(NA)
		1972.. 74.1	51	73	94	100	(NA)
24318	Other millwork products .....	1982.. 405.4	10	18	33	53	74
		1977.. 288.3	14	24	43	62	(NA)
		1972.. 161.6	12	18	33	55	(NA)
		1967.. 108.3	9	16	30	51	(NA)
		1963.. 89.4	9	15	26	42	(NA)
24310	Millwork, n.s.k. ....	1982.. 777.2	(X)	(X)	(X)	(X)	(X)
		1977.. 605.1	(X)	(X)	(X)	(X)	(NA)
		1972.. 379.3	(X)	(X)	(X)	(X)	(NA)
		1967.. 241.0	(X)	(X)	(X)	(X)	(NA)
		1963.. 125.4	(X)	(X)	(X)	(X)	(NA)
2434-	Wood kitchen cabinets <sup>11</sup> .....	1982.. 2 001.3	13	20	29	40	71
		1977.. 1 563.2	14	21	33	45	(NA)

See footnotes at end of table.

Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
24	LUMBER AND WOOD PRODUCTS—Con.						
2434-	Wood kitchen cabinets <sup>11</sup> —Con.						
	1972--	864.4	12	20	33	48	(NA)
24341	Wood kitchen cabinets and cabinetwork, stock line -----	1982-- 708.0	32	47	68	84	404
	1977-- 689.2	29	42	68	83	(NA)	
	1972-- 442.4	23	26	58	77	(NA)	
	1967-- 250.8	17	30	50	71	(NA)	
	1963-- 250.1	14	23	38	56	(NA)	
24342	Wood kitchen cabinets and cabinetwork, custom <sup>11</sup> -----	1982-- 496.4	12	18	28	43	73
	1977-- 433.2	10	15	26	39	(NA)	
	1972-- 234.9	12	20	35	51	(NA)	
24343	Vanities and other cabinetwork <sup>11</sup> -----	1982-- 244.3	15	24	39	59	120
	1977-- 146.4	18	26	39	55	(NA)	
	1972-- 71.6	20	27	44	64	(NA)	
	1967-- 141.2	8	13	22	37	(NA)	
	1963-- 149.6	9	14	21	33	(NA)	
	1958-- 76.7	7	11	20	34	(NA)	
24340	Wood kitchen cabinets, n.s.k. -----	1982-- 552.6	(X)	(X)	(X)	(X)	(X)
	1977-- 294.5	(X)	(X)	(X)	(X)	(NA)	
	1972-- 115.1	(X)	(X)	(X)	(X)	(NA)	
2435-	Hardwood veneer and plywood <sup>54</sup> -----	1982-- 1 237.0	26	39	54	72	250
	1977-- 1 160.0	27	39	56	73	(NA)	
	1972-- 873.2	32	40	56	73	(NA)	
24351	Hardwood plywood -----	1982-- 530.6	31	45	65	90	369
	1977-- 455.8	30	44	64	87	(NA)	
	1972-- 368.9	35	45	63	85	(NA)	
	1967-- 333.0	29	39	57	78	(NA)	
	1963-- 292.8	27	37	54	76	(NA)	
	1958-- 182.6	20	29	49	72	(NA)	
24352	Prefinished hardwood plywood, from purchased plywood <sup>11</sup> -----	1982-- 225.8	81	99	(D)	(D)	2 075
	1977-- 383.8	52	80	99	100	(NA)	
	1972-- 286.7	61	78	97	100	(NA)	
24353	Hardwood plywood type products <sup>11</sup> -----	1982-- 159.7	45	59	83	100	837
	1977-- 60.8	57	74	97	100	(NA)	
	1972-- 33.1	83	98	100	(X)	(NA)	
24354	Hardwood veneer, not reinforced or backed -----	1982-- 277.7	23	41	64	87	281
	1977-- 213.7	24	40	61	87	(NA)	
	1972-- 161.3	21	33	55	80	(NA)	
	1967-- 126.0	16	26	46	74	(NA)	
	1963-- 122.2	14	22	42	67	(NA)	
	1958-- 88.8	10	18	34	59	(NA)	
24350	Hardwood veneer and plywood, n.s.k. -----	1982-- 43.2	(X)	(X)	(X)	(X)	(X)
	1977-- 46.0	(X)	(X)	(X)	(X)	(NA)	
	1972-- 25.3	(X)	(X)	(X)	(X)	(NA)	
2436-	Softwood veneer and plywood <sup>54</sup> -----	1982-- 2 780.0	40	53	69	89	578
	1977-- 3 582.3	36	51	69	87	(NA)	
	1972-- 1 941.7	36	48	65	83	(NA)	
24363	Softwood plywood type products <sup>11</sup> -----	1982-- 73.5	63	84	99 +	100	1 333
	1977-- 102.6	68	87	99 +	100	(NA)	
	1972-- 39.6	79	91	99 +	100	(NA)	
24364	Softwood veneer, not reinforced or backed -----	1982-- 315.8	30	46	76	98	422
	1977-- 404.5	27	44	73	98	(NA)	
	1972-- 304.3	21	35	65	94	(NA)	
	1967-- 135.3	20	32	59	91	(NA)	
	1963-- 129.2	18	28	52	89	(NA)	
	1958-- 81.8	20	31	59	92	(NA)	
24365	Softwood plywood, rough <sup>55</sup> -----	1982-- 1 404.5	52	68	87	99 +	1 069
24366	Softwood plywood, sanded <sup>55</sup> -----	1982-- 572.8	38	58	88	100	582
24367	Softwood plywood specialties <sup>55</sup> -----	1982-- 381.6	56	77	96	100	947
24360	Softwood veneer and plywood, n.s.k. -----	1982-- 31.8	(X)	(X)	(X)	(X)	(X)
	1977-- 20.6	(X)	(X)	(X)	(X)	(NA)	
	1972-- 2.3	(X)	(X)	(X)	(X)	(NA)	
24390	Fabricated structural wood products <sup>56</sup> -----	1982-- 800.2	14	20	33	49	93
	1977-- 781.7	15	21	31	46	(NA)	
	1972-- 448.9	13	19	30	46	(NA)	
2441-	Nailed wood boxes and shook -----	1982-- 314.6	20	27	39	56	186
	1977-- 265.3	14	21	36	56	(NA)	
	1972-- 232.8	23	30	43	60	(NA)	
	1967-- 255.3	17	23	36	53	(NA)	

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
24	LUMBER AND WOOD PRODUCTS—Con.						
2441-	Nailed wood boxes and shook—Con.						
	1963--	189.4	14	19	29	44	(NA)
24411	Nailed or lock-corner wooden boxes -----	1982-- 109.0	23	33	56	78	228
	1977-- 93.8	21	35	58	82	(NA)	(NA)
	1972-- 86.5	29	43	66	88	(NA)	(NA)
	1967-- 111.9	26	39	58	80	(NA)	(NA)
	1963-- 83.8	15	23	36	58	(NA)	(NA)
24412	Wooden box and crate shook -----	1982-- 156.2	36	45	60	79	633
	1977-- 127.0	28	39	57	80	(NA)	(NA)
	1972-- 100.0	39	49	65	85	(NA)	(NA)
	1967-- 109.1	24	33	50	74	(NA)	(NA)
	1963-- 90.2	23	31	46	70	(NA)	(NA)
24410	Nailed wood boxes and shook, n.s.k. -----	1982-- 49.4	(X)	(X)	(X)	(X)	(X)
	1977-- 44.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1972-- 46.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1967-- 34.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1963-- 15.4	(X)	(X)	(X)	(X)	(X)	(NA)
24480	Pallets and skids -----	1982-- 969.7	5	7	13	23	14
	1977-- 642.9	5	8	14	25	(NA)	(NA)
	1972-- 286.5	6	10	18	33	(NA)	(NA)
	1967-- 187.0	8	13	24	40	(NA)	(NA)
	1963-- 98.7	6	11	20	36	(NA)	(NA)
24490	Wood containers, n.e.c. <sup>57</sup> -----	1982-- 295.6	26	41	66	87	321
	1977-- 235.3	24	38	62	86	(NA)	(NA)
	1972-- 218.1	22	36	58	85	(NA)	(NA)
2451-	Mobile homes <sup>58</sup> -----	1982-- 3 578.9	25	39	61	82	271
	1977-- 3 175.4	25	37	58	77	(NA)	(NA)
	1972-- 3 181.7	27	38	57	78	(NA)	(NA)
24511	Manufactured (mobile) homes (35 ft or more in length) <sup>58</sup> -----	1982-- 3 141.7	29	45	70	90	360
	1977-- 2 895.7	27	41	64	83	(NA)	(NA)
	1972-- 3 117.4	27	39	58	78	(NA)	(NA)
24512	Manufactured (mobile) buildings, nonresidential (35 ft or more in length) <sup>58</sup> -----	1982-- 183.7	35	53	82	99	493
	1977-- 83.3	45	64	91	100	(NA)	(NA)
	1972-- 44.5	36	53	79	99	(NA)	(NA)
24510	Mobile homes, n.s.k. <sup>58</sup> -----	1982-- 253.5	(X)	(X)	(X)	(X)	(X)
	1977-- 196.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1972-- 19.8	(X)	(X)	(X)	(X)	(X)	(NA)
2452-	Prefabricated wood buildings and components <sup>59</sup> -----	1982-- 1 286.5	18	28	46	62	151
	1977-- 1 863.8	23	36	49	65	(NA)	(NA)
	1972-- 993.7	32	40	52	68	(NA)	(NA)
24521	Components for wood buildings (not complete units) <sup>59</sup> -----	1982-- 130.9	36	49	72	93	527
	1977-- 232.2	31	44	66	94	(NA)	(NA)
	1972-- 116.3	39	51	73	96	(NA)	(NA)
24522	Precut packages for wood buildings (complete units) <sup>59</sup> -----	1982-- 287.2	51	64	81	97	1 072
	1977-- 362.9	43	59	79	96	(NA)	(NA)
	1972-- 152.9	53	64	83	99	(NA)	(NA)
24523	Wood buildings, complete units in panel form <sup>59</sup> -----	1982-- 278.6	45	63	84	99	686
	1977-- 652.7	54	65	81	97	(NA)	(NA)
	1972-- 452.5	49	62	77	94	(NA)	(NA)
24524	Wood buildings in three dimensional assemblies <sup>59</sup> -----	1982-- 369.1	31	52	77	96	433
	1977-- 365.1	45	58	79	99+	(NA)	(NA)
	1972-- 241.2	(S)	(S)	(S)	(S)	(NA)	(NA)
24520	Prefabricated wood buildings and components, n.s.k. <sup>59</sup> -----	1982-- 220.7	(X)	(X)	(X)	(X)	(X)
	1977-- 250.9	(X)	(X)	(X)	(X)	(X)	(NA)
	1972-- 30.7	(X)	(X)	(X)	(X)	(X)	(NA)
2491-	Wood preserving -----	1982-- 1 325.0	26	35	51	69	311
	1977-- 892.2	31	40	56	74	(NA)	(NA)
	1972-- 461.3	35	44	60	78	(NA)	(NA)
	1967-- 327.5	33	43	61	82	(NA)	(NA)
	1963-- 240.3	32	42	62	82	(NA)	(NA)
	1958-- 201.3	31	42	63	85	(NA)	(NA)
24912	Treated wood poles, piles, and posts <sup>11</sup> -----	1982-- 461.1	32	48	74	93	433
	1977-- 305.5	34	48	70	90	(NA)	(NA)
24913	Other treated wood products <sup>11</sup> -----	1982-- 617.4	30	42	59	82	401
	1977-- 418.3	42	53	69	88	(NA)	(NA)
24919	Contract wood preserving -----	1982-- 94.9	61	69	84	97	1 490
	1977-- 68.6	53	66	86	99	(NA)	(NA)
	1972-- 29.1	71	81	94	100	(NA)	(NA)
	1967-- 28.7	57	70	87	98	(NA)	(NA)
	1963-- 25.9	46	61	82	97	(NA)	(NA)
24910	Wood preserving, n.s.k. -----	1982-- 151.6	(X)	(X)	(X)	(X)	(X)
	1977-- 99.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972-- 38.0	(X)	(X)	(X)	(X)	(X)	(NA)
	1967-- 14.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1963-- 5.3	(X)	(X)	(X)	(X)	(X)	(NA)
24920	Particleboard <sup>60</sup> -----	1982-- 553.7	42	66	91	100	663
	1977-- 476.5	45	65	92	100	(NA)	(NA)
	1972-- 292.5	45	68	91	100	(NA)	(NA)
	1967-- 89.1	45	66	92	100	(NA)	(NA)
	1963-- 54.9	42	62	92	100	(NA)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
24	LUMBER AND WOOD PRODUCTS—Con.						
2499-	Wood products, n.e.c. <sup>61</sup> ----- 1982..	3 300.7	16	22	33	45	110
	1977..	2 488.7	18	25	36	49	(NA)
	1972..	1 480.4	16	22	32	44	(NA)
24991	Mirror and picture frames ----- 1982..	505.5	42	53	70	86	772
	1977..	314.6	41	54	71	87	(NA)
	1972..	173.0	37	49	67	85	(NA)
	1967..	115.7	32	46	66	86	(NA)
	1963..	82.2	29	43	61	79	(NA)
	1958..	57.3	24	34	52	71	(NA)
24992	Cork and cork products (1977 product class 24994) ----- 1982..	40.9	63	83	99+	100	1 685
	1977..	32.8	71	93	99+	100	(NA)
	1972..	19.0	63	85	99	100	(NA)
	1967..	20.5	46	63	85	100	(NA)
	1963..	25.6	58	68	88	100	(NA)
24993	Medium density fiberboard (MDF) <sup>11 62</sup> ----- 1982..	144.7	66	(D)	(D)	(X)	1 506
	1977..	84.2	53	88	99+	100	(NA)
24995	Prefinished particleboard and medium density fiberboard (MDF) made from purchased particleboard and MDF <sup>63</sup> ----- 1982..	110.3	43	60	85	99	689
24996	Hardboard products made from own hardboard <sup>64</sup> ----- 1982..	558.3	65	83	(D)	(D)	1 638
	1977..	508.7	63	85	99	100	(NA)
	1972..	260.4	53	77	98	100	(NA)
	1967..	159.1	67	83	100	(X)	(NA)
	1963..	131.4	76	88	100	(X)	(NA)
24998	Hardboard products made from purchased hardboard <sup>11</sup> ----- 1982..	148.1	48	67	92	100	1 038
	1977..	171.3	47	60	81	96	(NA)
2499A	Miscellaneous wood products <sup>11 65</sup> ----- 1982..	1 199.4	11	18	31	47	68
	1977..	1 005.9	10	17	30	48	(NA)
24990	Wood products, n.e.c., n.s.k. ----- 1982..	593.6	(X)	(X)	(X)	(X)	(X)
	1977..	372.0	(X)	(X)	(X)	(X)	(NA)
	1972..	327.5	(X)	(X)	(X)	(X)	(NA)
	1967..	145.2	(X)	(X)	(X)	(X)	(NA)
	1963..	64.0	(X)	(X)	(X)	(X)	(NA)
25	FURNITURE AND FIXTURES						
2511-	Wood household furniture <sup>66</sup> ----- 1982..	4 846.1	15	22	35	51	96
	1977..	3 890.7	14	22	37	54	(NA)
	1972..	2 716.8	14	22	39	56	(NA)
25112	Wood living room, library, family room, and den furniture, except sewing machine cabinets <sup>67</sup> ----- 1982..	1 221.7	20	33	51	71	197
	1977..	859.8	15	25	46	69	(NA)
	1972..	614.4	17	27	47	67	(NA)
	1967..	395.4	18	25	39	59	(NA)
	1963..	315.4	14	22	36	54	(NA)
	1958..	222.4	12	19	31	50	(NA)
25113	Wood dining room and kitchen furniture, except cabinets ----- 1982..	1 014.7	19	31	53	76	189
	1977..	962.3	23	36	59	81	(NA)
	1972..	603.8	19	33	58	79	(NA)
	1967..	375.7	21	34	54	73	(NA)
	1963..	272.3	17	30	48	67	(NA)
25115	Wood bedroom furniture ----- 1982..	1 515.7	22	35	55	79	218
	1977..	1 290.3	21	34	56	80	(NA)
	1972..	1 029.2	21	33	55	79	(NA)
	1967..	694.7	20	29	47	71	(NA)
	1963..	578.2	19	28	44	65	(NA)
	1958..	457.2	17	26	41	60	(NA)
25116	Infants' and children's wood furniture ----- 1982..	158.8	37	61	94	100	630
	1977..	118.8	44	70	94	100	(NA)
	1972..	82.5	36	57	84	99+	(NA)
	1967..	44.5	40	57	80	99	(NA)
	1963..	43.5	28	49	74	96	(NA)
	1958..	46.9	30	46	69	90	(NA)
25117	Wood outdoor, unpainted, and unassembled furniture ----- 1982..	249.9	33	48	75	94	456
	1977..	185.8	37	55	75	93	(NA)
	1972..	107.9	46	66	82	96	(NA)
	1967..	63.8	53	66	82	97	(NA)
	1963..	51.2	41	51	67	85	(NA)
25110	Wood household furniture, n.s.k. ----- 1982..	685.4	(X)	(X)	(X)	(X)	(X)
	1977..	473.7	(X)	(X)	(X)	(X)	(NA)
	1972..	279.1	(X)	(X)	(X)	(X)	(NA)
	1967..	217.4	(X)	(X)	(X)	(X)	(NA)
	1963..	90.2	(X)	(X)	(X)	(X)	(NA)
25120	Upholstered wood household furniture, except dual purpose sleep furniture <sup>68</sup> ----- 1982..	3 319.8	17	24	37	53	109
	1977..	2 735.7	14	23	34	49	(NA)
	1972..	1 990.5	14	22	34	49	(NA)
	1967..	1 215.5	12	18	28	41	(NA)
	1963..	959.0	12	17	25	38	(NA)
2514-	Metal household furniture ----- 1982..	1 517.4	17	25	41	65	140
	1977..	1 231.2	13	22	47	61	(NA)
	1972..	859.3	14	23	41	65	(NA)

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
25	FURNITURE AND FIXTURES—Con.							
2514-	Metal household furniture—Con.							
	1967..	587.8	12	21	35	56	(NA)	
	1963..	507.7	12	18	31	53	(NA)	
	1958..	484.0	12	19	33	52	(NA)	
25141	Metal household dining, dinette, and breakfast furniture -----	1982..	360.7	55	69	90	99+	1 241
	1977..	319.1	39	55	80	98	98	(NA)
	1972..	245.6	38	57	82	98	98	(NA)
	1967..	163.1	32	50	77	96	96	(NA)
	1963..	141.2	27	43	70	90	90	(NA)
	1958..	143.0	29	46	67	87	87	(NA)
25142	Metal kitchen furniture -----	1982..	61.8	47	66	94	100	831
	1977..	73.4	52	74	96	100	100	(NA)
	1972..	71.4	33	51	80	99+	98	(NA)
	1967..	56.5	31	48	73	98	98	(NA)
	1963..	62.8	29	45	70	94	94	(NA)
	1958..	89.7	33	46	68	89	89	(NA)
25143	Metal porch, lawn, outdoor, and casual furniture -----	1982..	399.4	33	50	80	99	469
	1977..	275.9	33	51	81	99	99	(NA)
	1972..	177.1	34	51	79	98	98	(NA)
	1967..	109.7	32	50	76	98	98	(NA)
	1963..	101.3	24	41	66	93	93	(NA)
	1958..	91.4	24	40	67	91	91	(NA)
25144	Other metal household furniture -----	1982..	539.2	20	36	64	89	261
	1977..	445.5	18	31	57	87	87	(NA)
	1972..	311.4	20	33	58	82	82	(NA)
	1967..	208.0	21	32	55	82	82	(NA)
	1963..	184.0	23	32	51	76	76	(NA)
25140	Metal household furniture, n.s.k. -----	1982..	156.3	(X)	(X)	(X)	(X)	(X)
	1977..	117.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1972..	53.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1967..	50.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1963..	18.5	(X)	(X)	(X)	(X)	(X)	(NA)
2515-	Mattresses and bedsprings -----	1982..	2 042.6	21	28	39	53	179
	1977..	1 481.5	18	28	39	54	54	(NA)
	1972..	1 073.8	22	28	40	54	54	(NA)
	1967..	709.6	25	31	40	53	53	(NA)
	1963..	608.7	23	28	36	50	50	(NA)
25151	Innerspring mattresses, other than crib size -----	1982..	705.3	33	42	55	72	424
	1977..	492.6	29	38	51	70	70	(NA)
	1972..	333.9	30	37	51	67	67	(NA)
	1967..	240.2	31	37	48	65	65	(NA)
	1963..	234.1	26	31	41	57	57	(NA)
25152	Other mattresses, including crib mattresses -----	1982..	159.1	25	42	66	85	301
	1977..	108.3	43	52	66	83	83	(NA)
	1972..	78.0	30	41	60	80	80	(NA)
	1967..	57.6	34	44	59	77	77	(NA)
	1963..	50.2	26	33	46	62	62	(NA)
25153	Foundations -----	1982..	461.3	32	43	59	77	355
	1977..	360.6	30	43	56	74	74	(NA)
	1972..	275.1	30	39	54	71	71	(NA)
	1967..	177.9	35	41	54	71	71	(NA)
	1963..	157.3	31	37	47	63	63	(NA)
25155	Dual purpose sleep furniture <sup>69</sup> -----	1982..	396.2	24	35	58	80	273
25156	Sleep system ensembles, except conventional water beds <sup>70</sup> -----	1982..	23.9	43	60	81	98	785
25158	Conventional water beds <sup>70</sup> -----	1982..	41.3	78	95	(D)	(D)	2 106
25150	Mattresses and bedsprings, n.s.k. <sup>70</sup> -----	1982..	255.6	(X)	(X)	(X)	(X)	(X)
25170	Wood TV, radio, stereo, and sewing machine cabinets <sup>71</sup> -----	1982..	302.4	53	71	88	97	869
	1977..	312.8	47	73	88	97	97	(NA)
	1972..	288.0	34	57	81	95	95	(NA)
25190	Household furniture, except wood or metal -----	1982..	324.5	33	46	67	86	453
	1977..	281.8	27	38	61	82	82	(NA)
	1972..	190.5	14	25	46	74	74	(NA)
	1967..	79.0	27	38	60	86	86	(NA)
	1963..	46.9	18	30	55	85	85	(NA)
	1958..	35.3	23	36	57	80	80	(NA)
25210	Wood office furniture -----	1982..	1 132.1	21	32	47	67	177
	1977..	562.2	25	36	55	76	76	(NA)
	1972..	259.0	23	34	54	73	73	(NA)
	1967..	158.1	25	41	63	82	82	(NA)
	1963..	100.4	27	41	64	86	86	(NA)
	1958..	70.7	22	38	63	83	83	(NA)
2522-	Metal office furniture -----	1982..	2 951.6	44	57	72	85	878
	1977..	1 353.0	47	56	72	88	88	(NA)
	1972..	781.7	37	49	70	88	88	(NA)
	1967..	586.1	32	45	69	88	88	(NA)
	1963..	358.1	29	45	69	88	88	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
25	FURNITURE AND FIXTURES—Con.						
2522-	Metal office furniture—Con.						
	1958..	273.3	33	49	73	89	(NA)
25221	Office seating, including upholstered, except wood.....	1982.. 708.0	43	57	77	96	947
	1977.. 388.1	50	67	89	99+	(NA)	(NA)
	1972.. 193.1	51	71	91	99+	(NA)	(NA)
	1967.. 133.6	51	67	87	100	(NA)	(NA)
	1963.. 73.6	48	67	88	99	(NA)	(NA)
	1958.. 53.5	48	65	91	99	(NA)	(NA)
25225	Office desks and extensions, except wood <sup>72</sup> .....	1982.. 232.2	57	69	89	99	1 026
25226	Office storage units, files, and tables, except wood <sup>72</sup> .....	1982.. 991.1	37	50	71	90	539
25227	Panel and modular systems furniture, and all other nonwood office furniture, n.e.c. <sup>72</sup> .....	1982.. 969.8	73	86	96	99+	1 995
25220	Office furniture, except wood, n.s.k. ....	1982.. 50.6	(X)	(X)	(X)	(X)	(X)
	1977.. 33.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 29.0	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 14.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 2.7	(X)	(X)	(X)	(X)	(X)	(NA)
2531-	Public building and related furniture .....	1982.. 1 052.5	19	29	44	64	148
	1977.. 724.7	17	26	45	65	(NA)	(NA)
	1972.. 485.2	18	26	40	59	(NA)	(NA)
	1967.. 389.7	18	30	46	64	(NA)	(NA)
	1963.. 263.3	21	32	45	62	(NA)	(NA)
	1958.. 218.9	24	34	47	65	(NA)	(NA)
25311	School furniture, except stone and concrete .....	1982.. 229.5	28	39	62	87	331
	1977.. 185.4	30	48	71	92	(NA)	(NA)
	1972.. 181.2	21	36	59	84	(NA)	(NA)
	1967.. 158.5	26	40	60	81	(NA)	(NA)
	1963.. 118.0	32	46	62	82	(NA)	(NA)
25312	Public building furniture, except school furniture .....	1982.. 744.1	23	35	53	76	216
	1977.. 479.5	20	33	54	75	(NA)	(NA)
	1972.. 268.3	22	31	49	72	(NA)	(NA)
	1967.. 209.5	27	39	56	76	(NA)	(NA)
	1963.. 134.2	21	31	49	72	(NA)	(NA)
25310	Public building furniture, n.s.k. ....	1982.. 79.0	(X)	(X)	(X)	(X)	(X)
	1977.. 59.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 35.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 21.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 11.1	(X)	(X)	(X)	(X)	(X)	(NA)
2541-	Wood partitions and fixtures .....	1982.. 1 676.8	7	11	21	35	31
	1977.. 1 070.8	7	11	21	33	(NA)	(NA)
	1972.. 772.1	5	9	19	33	(NA)	(NA)
	1967.. 484.5	6	10	18	33	(NA)	(NA)
	1963.. 384.5	4	7	14	25	(NA)	(NA)
25411	Wood partitions, shelving, and lockers .....	1982.. 152.5	24	41	69	91	315
	1977.. 135.6	33	45	69	91	(NA)	(NA)
	1972.. 77.0	31	47	75	94	(NA)	(NA)
25412	Plastics laminated fixture tops .....	1982.. 236.9	19	27	43	61	146
	1977.. 204.2	17	24	37	56	(NA)	(NA)
	1972.. 141.8	16	25	41	61	(NA)	(NA)
25413	Wood fixtures for stores, banks, offices, etc. ....	1982.. 997.0	11	19	32	50	73
	1977.. 561.1	10	18	33	52	(NA)	(NA)
	1972.. 354.0	10	18	33	53	(NA)	(NA)
25410	Wood partitions, shelving, lockers, and fixtures, n.s.k. ....	1982.. 290.3	(X)	(X)	(X)	(X)	(X)
	1977.. 169.9	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 199.3	(X)	(X)	(X)	(X)	(X)	(NA)
2542-	Metal partitions and fixtures .....	1982.. 1 828.2	12	20	36	55	87
	1977.. 1 215.8	13	21	37	57	(NA)	(NA)
	1972.. 713.1	13	22	39	59	(NA)	(NA)
	1967.. 512.2	19	27	43	64	(NA)	(NA)
	1963.. 367.6	19	26	41	61	(NA)	(NA)
25421	Partitions, except wood .....	1982.. 218.0	40	54	78	99	635
	1977.. 96.7	45	61	86	100	(NA)	(NA)
	1972.. 79.3	49	64	88	99+	(NA)	(NA)
25422	Shelving and lockers, except wood .....	1982.. 469.4	32	49	75	95	422
	1977.. 349.4	31	46	71	92	(NA)	(NA)
	1972.. 230.5	31	49	74	94	(NA)	(NA)
25423	Storage racks and accessories, except wood .....	1982.. 342.9	36	49	71	93	507
	1977.. 275.6	32	46	68	91	(NA)	(NA)
	1972.. 95.2	33	51	77	97	(NA)	(NA)
25424	Fixtures for stores, banks, and offices, except wood .....	1982.. 636.3	18	27	48	72	166
	1977.. 391.0	21	33	56	78	(NA)	(NA)
	1972.. 217.3	24	38	61	81	(NA)	(NA)
25420	Partitions, shelving, lockers, and fixtures (except wood), n.s.k. ....	1982.. 161.6	(X)	(X)	(X)	(X)	(X)
	1977.. 103.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 90.8	(X)	(X)	(X)	(X)	(X)	(NA)
2591-	Drapery hardware and blinds and shades .....	1982.. 1 001.2	42	60	73	83	607
	1977.. 615.3	42	62	79	87	(NA)	(NA)
	1972.. 311.4	47	63	76	83	(NA)	(NA)
	1967.. 207.0	39	55	72	81	(NA)	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
25	FURNITURE AND FIXTURES—Con.						
2591-	Drapery hardware and blinds and shades—Con.						
	1963..	170.8	34	49	68	77	(NA)
25913	Window shades and accessories <sup>11</sup> .....	181.0	57	76	91	98	1 102
	1977..	140.3	72	83	91	98	(NA)
25914	Venetian blinds <sup>11</sup> .....	406.5	62	73	84	95	1 525
	1977..	89.6	68	78	89	97	(NA)
25915	Other shades and blinds, n.e.c., and curtain and drapery rods, and poles, etc. <sup>11</sup> .....	301.8	71	85	95	99+	1 793
	1977..	329.7	68	78	89	97	(NA)
25910	Drapery hardware, blinds, and shades, n.s.k. ....	111.9	(X)	(X)	(X)	(X)	(X)
	1977..	55.7	(X)	(X)	(X)	(X)	(NA)
	1972..	40.9	(X)	(X)	(X)	(X)	(NA)
	1967..	30.6	(X)	(X)	(X)	(X)	(NA)
	1963..	11.5	(X)	(X)	(X)	(X)	(NA)
25990	Furniture and fixtures, n.e.c. ....	1 271.3	15	22	34	50	93
	1977..	687.4	12	18	31	51	(NA)
	1972..	379.1	12	19	34	53	(NA)
	1967..	193.8	15	23	38	59	(NA)
	1963..	138.0	13	22	37	57	(NA)
26	PAPER AND ALLIED PRODUCTS						
2611-	Pulp mill products .....						
	1982..	3 644.2	36	55	83	99+	507
	1977..	2 466.4	36	57	84	99+	(NA)
	1972..	1 132.4	43	61	85	99	(NA)
	1967..	904.8	37	56	83	99	(NA)
	1963..	726.0	38	59	83	98	(NA)
	1958..	567.7	37	57	82	99	(NA)
26111	Special alpha and dissolving woodpulp .....	593.8	(D)	(D)	100	(X)	2 182
	1977..	570.5	(D)	100	(X)	(X)	(NA)
	1972..	304.7	(D)	100	(X)	(X)	(NA)
	1967..	227.2	80	(D)	100	(X)	(NA)
	1963..	210.0	83	(D)	100	(X)	(NA)
	1958..	134.3	(D)	100	(X)	(X)	(NA)
26113	Sulfate wood pulp <sup>73</sup> .....	2 510.8	33	53	86	100	493
26114	Sulfite and other wood pulp <sup>73</sup> .....	183.0	80	96	100	(X)	1 888
26115	Pulp, other than wood, and pulpmill byproducts, n.e.c. <sup>73</sup> .....	353.0	57	76	93	99+	1 076
26110	Pulp mill products, n.s.k. ....	3.6	(X)	(X)	(X)	(X)	(X)
	1977..	1.1	(X)	(X)	(X)	(X)	(NA)
	1972..	1.7	(X)	(X)	(X)	(X)	(NA)
	1967..	3.8	(X)	(X)	(X)	(X)	(NA)
	1963..	.1	(X)	(X)	(X)	(X)	(NA)
2621-	Paper mill products, except building paper .....	20 056.9	22	40	71	91	309
	1977..	12 438.2	24	40	69	90	(NA)
	1972..	6 183.7	25	40	65	86	(NA)
	1967..	4 739.5	26	41	64	85	(NA)
	1963..	3 724.0	26	40	61	83	(NA)
	1958..	3 044.6	25	39	58	78	(NA)
26211	Newsprint .....	2 161.6	49	73	100	(X)	892
	1977..	989.3	47	77	100	(X)	(NA)
	1972..	506.0	49	78	100	(X)	(NA)
	1967..	321.8	52	81	(D)	100	(NA)
	1963..	270.8	57	88	100	(X)	(NA)
	1958..	214.8	62	93	100	(X)	(NA)
26212	Uncoated groundwood paper .....	841.5	59	83	99+	100	1 161
	1977..	539.0	70	96	99+	100	(NA)
	1972..	232.7	63	88	99+	100	(NA)
	1967..	192.6	53	78	99	100	(NA)
	1963..	165.6	50	75	99	100	(NA)
	1958..	143.8	47	70	99	100	(NA)
26213	Clay coated printing and converting papers .....	3 787.3	36	64	98	100	650
	1977..	2 260.9	37	65	98	100	(NA)
	1972..	1 026.2	36	64	96	100	(NA)
	1967..	818.1	38	66	98	100	(NA)
	1963..	498.6	44	75	99	99+	(NA)
	1958..	362.5	52	83	100	(X)	(NA)
	1954..	252.6	55	83	100	(X)	(NA)
26214	Uncoated free sheet <sup>11</sup> .....	5 530.6	34	57	84	99+	506
	1977..	3 352.7	31	52	79	99+	(NA)
26215	Bleached bristols, excluding cotton fiber index and bogus .....	605.2	58	87	99+	100	1 219
	1977..	474.3	60	83	99+	100	(NA)
	1972..	243.5	68	87	99	100	(NA)
	1967..	210.6	67	82	99	100	(NA)
26216	Cotton fiber paper and thin paper <sup>11</sup> .....	599.3	60	79	98	100	1 106
	1977..	496.1	60	79	98	100	(NA)
26217	Unbleached kraft packaging and ind. converting paper .....	1 199.8	48	76	98	100	854
	1977..	1 098.6	41	63	96	100	(NA)
	1972..	602.8	40	61	92	100	(NA)
	1967..	503.1	39	61	92	100	(NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
26	PAPER AND ALLIED PRODUCTS—Con.							
2621- 26218	Paper mill products, except building paper—Con. Packaging and industrial converting paper, except unbleached kraft -----	1982-- 1977-- 1972-- 1967--	666.7 560.6 370.2 283.8	37 47 37 38	61 67 54 58	95 95 90 88	100 100 100 100	631 (NA) (NA) (NA)
26219	Special industrial paper -----	1982-- 1977-- 1972-- 1967--	942.8 550.7 272.0 193.2	42 39 36 31	60 59 57 49	88 88 85 81	100 100 99+ 99+	737 (NA) (NA) (NA)
2621A	Tissue paper and other machine creped paper (1977 product class 26210) -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	3 685.4 742 115.9 946.0 692.8 547.4 440.1 352.7	67 58 56 53 56 57 54	88 80 77 74 72 69 64	98 92 92 90 88 83 80	100 99+ 99 99+ 99 94 (NA)	1 311 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
26210	Paper mill products, except building paper, n.s.k. -----	1982-- 1977-- 1972-- 1967-- 1963--	36.7 (74) 13.1 5.2 2.7	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)
2631-	Paperboard mill products -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	9 390.0 6 434.7 3 657.5 2 673.1 2 184.7 1 697.7	27 26 26 24 25 27	42 40 41 39 39 39	71 67 67 62 63 61	95 92 92 89 86 85	353 (NA) (NA) (NA) (NA) (NA) (NA)
26311	Unbleached kraft packaging and industrial converting paperboard --	1982-- 1977-- 1972-- 1967--	4 076.1 2 697.2 1 562.2 974.8	34 31 37 35	53 51 58 54	89 86 88 90	100 100 100 100	539 (NA) (NA) (NA)
26312	Bleached packaging and industrial converting paperboard -----	1982-- 1977-- 1972-- 1967--	2 146.0 1 364.6 696.3 522.6	55 48 42 41	76 73 67 66	99+ (D) 99 97	100 100 100 100	1 078 (NA) (NA) (NA)
26313	Semichemical paperboard -----	1982-- 1977-- 1972-- 1967--	1 012.5 748.9 415.3 294.9	43 32 33 40	63 55 52 60	96 85 86 96	100 100 100 100	704 (NA) (NA) (NA)
26314	Recycled paperboard <sup>11</sup> -----	1982-- 1977-- 1972--	2 062.1 1 562.7 929.5	25 26 29	41 40 44	74 69 70	95 92 91	359 (NA) (NA)
26318	Wet machine board -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	62.8 59.3 46.6 36.4 37.3 28.9	73 75 71 63 54 48	94 96 89 84 76 72	100 100 100 100 98 97	(X) (X) (X) (X) (NA) 100	1 672 (NA) (NA) (NA) (NA) (NA) (NA)
26310	Paperboard mill products, n.s.k. -----	1982-- 1977-- 1972-- 1967-- 1963--	30.4 2.0 7.5 34.0 1.5	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
2641-	Coated and glazed paper -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	4 903.1 3 043.2 1 653.1 1 354.6 1 170.7 812.2	33 28 26 29 30 26	42 40 37 40 42 40	56 57 56 58 59 58	73 76 77 78 79 79	440 (NA) (NA) (NA) (NA) (NA) (NA)
26411	Printing paper coated at establishments other than where paper was produced -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	241.6 172.0 114.8 125.3 147.9 96.0 82.5	49 56 56 61 56 58 50	66 72 70 81 86 85 79	86 91 95 94 99 98 98	99 100 100 100 100 (NA) (NA)	725 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
26413	Gummed products -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	211.9 187.6 139.2 125.6 98.2 78.4 66.4	46 38 30 36 32 36 35	70 62 53 59 55 61 63	94 89 92 91 89 92 92	100 100 99+ 99+ 99+ 99 (NA)	781 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
26414	Pressure sensitive products -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	1 867.6 1 177.7 574.5 438.3 311.7 183.4 148.9	(D) 56 59 68 65 76 (D)	73 69 74 81 76 88 95	87 89 90 94 92 97 98	95 96 98 99 99 99 (NA)	2 124 (NA) (NA) (NA) (NA) (NA) (NA) (NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
26	PAPER AND ALLIED PRODUCTS—Con.						
2641- 26415	Coated and glazed paper—Con. Single web paper, coated rolls and sheets, including waxed, for packaging uses <sup>75</sup> ----- 1982--	433.9	47	59	84	99 +	723
26416	Single web film, coated roll and sheets, including coextruded, for packaging uses <sup>75</sup> ----- 1982--	168.2	53	73	95	100	1 064
26419	Paper/paper multiweb laminations, for packaging uses <sup>75</sup> ----- 1982--	182.3	46	68	96	100	857
2641A	Multiweb laminated rolls and sheets except paper/paper and foil for packaging uses <sup>75</sup> ----- 1982--	544.8	41	58	84	99 +	625
2641B	Other coated and processed paper, except for packaging <sup>75</sup> ----- 1982--	900.3	50	65	85	97	1 253
26410	Coated and glazed paper, n.s.k. <sup>75</sup> ----- 1982--	352.6	(X)	(X)	(X)	(X)	(X)
	1977--	131.3	(X)	(X)	(X)	(X)	(NA)
	1972--	51.3	(X)	(X)	(X)	(X)	(NA)
	1967--	27.7	(X)	(X)	(X)	(X)	(NA)
	1963--	7.6	(X)	(X)	(X)	(X)	(NA)
	1958--	2.3	(X)	(X)	(X)	(X)	(NA)
26420	Envelopes, all types and materials (except stationery) ----- 1982--	1 751.6	26	43	64	81	299
	1977--	980.6	26	40	62	82	(NA)
	1972--	587.7	27	41	62	81	(NA)
	1967--	443.4	28	40	59	81	(NA)
	1963--	330.7	26	37	55	79	(NA)
	1958--	246.9	27	37	54	77	(NA)
	1954--	197.3	27	35	51	(NA)	(NA)
2643-	Bags, except textile bags----- 1982--	4 772.8	24	37	56	73	254
	1977--	3 304.1	24	37	55	72	(NA)
	1972--	1 826.4	21	36	58	74	(NA)
	1967--	1 292.7	22	35	56	73	(NA)
	1963--	976.9	23	35	55	73	(NA)
	1958--	857.2	28	43	62	79	(NA)
26434	Grocer's bags and sacks, variety, shopping, uncoated <sup>76</sup> ----- 1982--	1 163.8	37	57	87	99 +	570
26435	Specialty bags and liners, single web paper, coated <sup>76</sup> ----- 1982--	205.5	49	63	90	100	850
26436	Specialty bags and liners, single web film <sup>76</sup> ----- 1982--	1 964.0	40	51	65	82	735
26437	Specialty bags and liners, multiweb laminations and foil <sup>76</sup> ----- 1982--	222.1	70	81	97	100	2 909
26438	Shipping sacks and multiwall bags, except textiles (1977 product class 26433)----- 1982--	846.5	49	66	90	100	778
	1977--	672.6	46	63	87	99 +	(NA)
	1972--	408.4	43	58	85	99 +	(NA)
	1967--	316.4	48	65	87	99 +	(NA)
	1963--	288.6	46	65	87	99 +	(NA)
	1958--	312.7	50	64	84	(NA)	(NA)
	1954--	255.0	57	69	89	(NA)	(NA)
26430	Bags, except textile bags, n.s.k. ----- 1982--	370.9	(X)	(X)	(X)	(X)	(X)
	1977--	214.3	(X)	(X)	(X)	(X)	(NA)
	1972--	88.2	(X)	(X)	(X)	(X)	(NA)
	1967--	42.1	(X)	(X)	(X)	(X)	(NA)
	1963--	18.1	(X)	(X)	(X)	(X)	(NA)
2645-	Die-cut paper and board ----- 1982--	1 605.1	37	47	62	79	466
	1977--	1 034.3	35	46	61	78	(NA)
	1972--	646.6	37	47	61	80	(NA)
	1967--	547.6	30	40	55	75	(NA)
	1963--	380.1	30	39	56	74	(NA)
	1958--	264.9	34	43	59	76	(NA)
26453	Die-cut paper and board office supplies <sup>77</sup> ----- 1982--	597.9	45	60	81	94	702
26454	Die-cut paper and board products (other than office) <sup>77</sup> ----- 1982--	199.4	33	50	73	94	422
26455	Pasted, lined, laminated, or surface-coated paperboard (1977 product class 26452) ----- 1982--	684.8	67	77	92	99 +	1 922
	1977--	438.4	70	82	93	99 +	(NA)
	1972--	271.3	62	71	86	98	(NA)
	1967--	167.7	55	65	83	98	(NA)
26450	Die-cut paper and board products, n.s.k. ----- 1982--	123.0	(X)	(X)	(X)	(X)	(X)
	1977--	111.0	(X)	(X)	(X)	(X)	(NA)
	1972--	31.7	(X)	(X)	(X)	(X)	(NA)
	1967--	33.3	(X)	(X)	(X)	(X)	(NA)
	1963--	9.2	(X)	(X)	(X)	(X)	(NA)
26460	Pressed and molded pulp goods <sup>78</sup> ----- 1982--	242.3	91	97	99 +	100	(D)
	1977--	239.6	86	93	99	100	(NA)
	1972--	161.6	75	89	98	100	(NA)
	1967--	142.7	71	86	96	100	(NA)
	1963--	112.0	70	85	94	99 +	(NA)
	1958--	80.4	67	87	96	99	(NA)
	1954--	45.2	76	92	99	(NA)	(NA)
2647-	Sanitary paper products----- 1982--	8 373.5	64	82	96	99	1 335
	1977--	4 562.6	65	84	97	99 +	(NA)
	1972--	1 981.9	65	82	94	99	(NA)
	1967--	1 234.4	61	78	91	98	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
26	PAPER AND ALLIED PRODUCTS—Con.						
2647-	Sanitary paper products—Con.						
	1963--	925.4	59	75	90	98	(NA)
26471	Sanitary napkins and tampons-----	1982-- 915.1	98	(D)	100	(X)	(D)
	1977-- 588.1	97	(D)	100	(X)	(NA)	(NA)
	1972-- 281.1	91	(D)	100	(X)	(NA)	(NA)
	1967-- 182.1	95	(D)	100	(X)	(NA)	(NA)
	1963-- 142.0	(D)	(D)	100	(X)	(NA)	(NA)
	1958-- 116.1	97	(D)	100	(X)	(NA)	(NA)
	1954-- 76.1	98	100	(X)	(X)	(NA)	(NA)
26473	Disposable diapers, except diaper liners, paper <sup>79</sup> -----	1982-- 2 158.5	96	100	(X)	(X)	(D)
26474	Sanitary tissue health products <sup>79</sup> -----	1982-- 5 259.8	64	86	97	99+	1 263
26470	Sanitary paper products, n.s.k.-----	1982-- 40.1	(X)	(X)	(X)	(X)	(X)
	1977-- 25.6	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 8.1	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967-- 11.7	(X)	(X)	(X)	(X)	(NA)	(NA)
2648-	Stationery products <sup>80</sup> -----	1982-- 959.2	28	40	58	81	319
	1977-- 630.5	28	42	62	82	(NA)	(NA)
	1972-- 422.6	26	38	56	73	(NA)	(NA)
	1967-- 256.7	33	44	65	87	(NA)	(NA)
	1963-- 202.1	30	42	63	86	(NA)	(NA)
	1958-- 151.2	28	42	65	88	(NA)	(NA)
	1954-- 106.5	31	43	64	(NA)	(NA)	(NA)
26481	Stationery <sup>80</sup> -----	1982-- 261.8	35	52	78	96	537
	1977-- 141.2	34	50	74	91	(NA)	(NA)
	1972-- 118.1	38	54	78	95	(NA)	(NA)
26482	Tablets, pads, and related products <sup>80</sup> -----	1982-- 603.1	42	54	76	95	626
	1977-- 425.5	40	54	79	97	(NA)	(NA)
	1972-- 220.7	41	56	79	98	(NA)	(NA)
26480	Stationery products, n.s.k. <sup>80</sup> -----	1982-- 94.4	(X)	(X)	(X)	(X)	(X)
	1977-- 63.8	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 83.8	(X)	(X)	(X)	(X)	(NA)	(NA)
2649-	Converted paper products, n.e.c. <sup>81</sup> -----	1982-- 2 436.1	14	21	36	52	89
	1977-- 1 748.8	12	19	34	53	(NA)	(NA)
	1972-- 665.1	14	24	42	64	(NA)	(NA)
26493	Wallcoverings-----	1982-- 396.9	51	69	88	99	819
	1977-- 306.5	45	63	87	100	(NA)	(NA)
	1972-- 83.0	49	63	84	97	(NA)	(NA)
	1967-- 46.2	39	56	79	98	(NA)	(NA)
	1963-- 33.6	32	48	75	97	(NA)	(NA)
	1958-- 35.6	41	57	82	98	(NA)	(NA)
	1954-- 39.6	40	57	79	(NA)	(NA)	(NA)
26494	Gift wrap paper <sup>82</sup> -----	1982-- 389.6	65	86	97	100	1 270
26496	Paper business machine supplies, office supplies, n.e.c. <sup>82</sup> -----	1982-- 221.8	48	66	88	100	760
26497	Other converted paper and board products <sup>82</sup> -----	1982-- 1 082.6	12	20	34	56	85
26490	Converted paper products, n.e.c., n.s.k.-----	1982-- 345.2	(X)	(X)	(X)	(X)	(X)
	1977-- 242.7	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 6.6	(X)	(X)	(X)	(X)	(NA)	(NA)
26510	Bending paperboard packaging and packaging components-----	1982-- 3 743.9	20	33	51	68	192
	1977-- 2 393.4	20	32	52	71	(NA)	(NA)
	1972-- 1 360.0	20	32	49	68	(NA)	(NA)
	1967-- 1 116.2	21	33	51	68	(NA)	(NA)
	1963-- 1 026.0	21	34	51	67	(NA)	(NA)
	1958-- 815.4	21	31	49	66	(NA)	(NA)
	1954-- 625.4	19	31	50	(NA)	(NA)	(NA)
26520	Set-up (rigid) paperboard boxes-----	1982-- 485.1	13	23	39	59	105
	1977-- 377.7	11	18	34	53	(NA)	(NA)
	1972-- 342.6	10	16	29	46	(NA)	(NA)
	1967-- 291.8	11	18	29	45	(NA)	(NA)
	1963-- 232.3	10	18	28	44	(NA)	(NA)
	1958-- 225.9	10	16	26	42	(NA)	(NA)
	1954-- 220.3	9	13	21	(NA)	(NA)	(NA)
26530	Corrugated and solid fiber boxes, including pallets-----	1982-- 10 303.1	19	34	59	73	214
	1977-- 7 182.8	19	34	59	75	(NA)	(NA)
	1972-- 4 196.9	19	33	58	76	(NA)	(NA)
	1967-- 2 893.2	18	33	61	78	(NA)	(NA)
	1963-- 2 136.2	19	36	62	79	(NA)	(NA)
	1958-- 1 627.6	21	36	55	73	(NA)	(NA)
2654-	Sanitary food containers-----	1982-- 2 555.8	47	64	82	94	705
	1977-- 1 964.9	43	62	81	92	(NA)	(NA)
	1972-- 1 388.0	41	58	80	90	(NA)	(NA)
	1967-- 1 105.8	45	62	82	93	(NA)	(NA)
	1963-- 854.7	54	72	88	97	(NA)	(NA)

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Hertindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
26	PAPER AND ALLIED PRODUCTS—Con.						
2654-	Sanitary food containers—Con.						
	1958..	642.5	56	75	90	97	(NA)
26541	Milk and other beverage cartons .....	1982.. 550.5	96	(D)	(D)	(X)	(D)
	1977.. 480.0	92	99 +	100	100	(X)	(NA)
	1972.. 331.5	79	97	100	100	(X)	(NA)
	1967.. 278.9	79	96	100	100	(X)	(NA)
	1963.. 284.8	81	(D)	100	100	(X)	(NA)
	1958.. 199.3	89	(D)	100	100	(X)	(NA)
26542	Cups and liquid-tight containers .....	1982.. 885.2	83	93	99 +	(D)	2 074
	1977.. 594.1	81	90	99	100	(NA)	(NA)
	1972.. 443.7	77	91	99	100	(NA)	(NA)
	1967.. 384.5	76	93	99	100	(NA)	(NA)
	1963.. 300.0	75	92	99	100	(NA)	(NA)
	1958.. 230.5	79	93	99	100	(NA)	(NA)
26544	Folding sanitary food containers for liquid, etc. <sup>63</sup> .....	1982.. 714.7	41	60	82	96	819
26545	Other sanitary food containers, boards, and trays <sup>63</sup> .....	1982.. 362.2	44	68	96	100	764
26540	Sanitary food containers, n.s.k. ....	1982.. 43.1	(X)	(X)	(X)	(X)	(X)
	1977.. 48.6	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972.. 21.3	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967.. 11.6	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963.. 1.6	(X)	(X)	(X)	(X)	(NA)	(NA)
2655-	Fiber cans, drums, and similar products .....	1982.. 1 490.3	57	72	84	94	989
	1977.. 1 040.4	53	71	83	92	(NA)	(NA)
	1972.. 620.0	52	67	80	90	(NA)	(NA)
	1967.. 425.4	49	69	82	92	(NA)	(NA)
	1963.. 302.1	51	71	82	91	(NA)	(NA)
	1958.. 189.2	45	63	77	89	(NA)	(NA)
26551	Paperboard fiber drums .....	1982.. 289.8	(D)	96	100	(X)	(D)
	1977.. 223.8	92	98	100	(X)	(NA)	(NA)
	1972.. 136.9	(D)	94	(D)	100	(NA)	(NA)
	1967.. 93.4	(D)	98	100	(X)	(NA)	(NA)
	1963.. 62.0	(D)	(D)	100	(X)	(NA)	(NA)
	1958.. 55.3	(D)	(D)	94	99	(NA)	(NA)
26552	Fiber cans, tubes, and similar fiber products .....	1982.. 1 152.3	62	73	87	97	1 270
	1977.. 782.6	58	72	84	95	(NA)	(NA)
	1972.. 465.7	53	67	81	93	(NA)	(NA)
	1967.. 322.0	51	67	82	94	(NA)	(NA)
	1963.. 236.9	51	71	82	92	(NA)	(NA)
	1958.. 133.9	43	60	75	91	(NA)	(NA)
26550	Fiber cans, drums, and similar products, n.s.k. ....	1982.. 48.2	(X)	(X)	(X)	(X)	(X)
	1977.. 34.0	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972.. 17.5	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967.. 10.1	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963.. 3.2	(X)	(X)	(X)	(X)	(NA)	(NA)
2661-	Building paper and board .....	1982.. 354.3	51	71	98	100	1 045
	1977.. 514.3	45	70	99	100	(NA)	(NA)
	1972.. 401.9	47	66	95	99 +	(NA)	(NA)
	1967.. 317.9	46	67	94	99 +	(NA)	(NA)
	1963.. 299.5	42	62	93	99 +	(NA)	(NA)
	1958.. 295.3	39	59	(NA)	(NA)	(NA)	(NA)
26611	Fiberboard .....	1982.. 188.9	64	95	100	(X)	1 380
	1977.. 222.2	59	84	100	(X)	(NA)	(NA)
	1972.. 219.7	58	78	100	(X)	(NA)	(NA)
	1967.. 177.3	59	82	(D)	100	(NA)	(NA)
	1963.. 171.3	49	75	(D)	(D)	(NA)	(NA)
	1958.. 169.8	53	76	98	100	(NA)	(NA)
26612	Construction paper .....	1982.. 165.3	59	89	100	(D)	1 334
	1977.. 291.8	59	88	100	(X)	(NA)	(NA)
	1972.. 175.6	51	78	99 +	100	(NA)	(NA)
	1967.. 135.3	48	74	98	100	(NA)	(NA)
	1963.. 126.7	45	71	97	100	(NA)	(NA)
	1958.. 121.1	39	63	86	95	(NA)	(NA)
	1954.. 121.1	41	66	92	(NA)	(NA)	(NA)
26610	Building paper and board, n.s.k. ....	1982.. (Z)	(X)	(X)	(X)	(X)	(D)
	1977.. .3	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972.. 6.6	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967.. 5.3	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963.. 1.5	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958.. 4.3	(X)	(X)	(X)	(X)	(NA)	(NA)
27	PRINTING AND PUBLISHING						
2711-	Newspapers .....	1982.. 20 313.7	23	35	50	67	203
	1977.. 12 468.1	20	32	46	63	(NA)	(NA)
	1972.. 7 901.1	17	29	44	61	(NA)	(NA)
	1967.. 5 549.8	16	25	40	56	(NA)	(NA)
	1963.. 4 254.7	15	22	36	53	(NA)	(NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
27	PRINTING AND PUBLISHING—Con.							
2711-	Newspapers—Con.	1958--	3 458.3	18	25	36	53	(NA)
27111	Daily and Sunday newspapers, subscriptions and sales -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	3 922.5 2 561.1 1 745.5 1 309.1 1 064.4 916.7	28 24 20 19 20 25	42 38 33 29 28 32	59 55 51 47 43 46	76 73 70 64 61 63	288 (NA) (NA) (NA) (NA) (NA) (NA)
27112	Daily and Sunday newspapers, advertising -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	13 233.2 8 140.5 5 207.9 3 652.5 2 727.5 2 208.7	27 23 20 18 15 18	41 36 32 28 24 26	59 53 49 45 39 39	78 73 69 64 58 57	276 (NA) (NA) (NA) (NA) (NA) (NA)
27113	Weekly and other newspapers, subscriptions and sales -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	429.6 240.6 106.9 78.2 82.9 62.6	46 35 (S) 26 18 11	52 43 (S) 33 22 14	58 51 (S) 41 29 20	67 61 (S) 54 38 28	883 (NA) (NA) (NA) (NA) (NA) (NA)
27114	Weekly and other newspapers, advertising -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	1 106.9 734.5 386.5 243.2 296.0 235.2	9 6 5 5 6 3	15 11 10 10 8 5	26 22 20 18 13 9	41 35 34 30 20 16	50 (NA) (NA) (NA) (NA) (NA) (NA)
27110	Newspaper publishing, n.s.k. -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	1 621.5 791.4 454.5 266.8 83.9 35.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2721-	Periodicals-----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	10 625.8 5 528.8 3 187.0 2 668.2 2 035.5 1 578.4	19 20 22 23 26 31	29 31 33 36 39 40	47 49 50 53 56 54	62 64 65 68 69 67	169 (NA) (NA) (NA) (NA) (NA) (NA)
27211	Farm periodicals, subscriptions, sales, advertising -----	1982-- 1977--	246.9 107.5	34 46	55 67	79 85	96 98	484 (NA)
27213	Business and professional periodicals, subscriptions and sales -----	1982-- 1977-- 1972-- 1967-- 1963--	952.8 464.2 262.2 149.6 122.7	36 27 31 31 23	47 38 40 41 30	63 58 59 58 44	80 77 77 77 62	473 (NA) (NA) (NA) (NA) (NA)
27214	Business and professional periodicals, advertising -----	1982-- 1977-- 1972-- 1967-- 1963--	1 647.5 850.2 648.0 524.9 412.7	22 28 26 34 28	34 40 36 45 37	53 56 52 59 49	72 73 71 73 65	211 (NA) (NA) (NA) (NA) (NA)
2721A	General and consumer periodicals, subscriptions <sup>84</sup> -----	1982--	1 596.6	36	51	75	90	452
2721B	General and consumer periodicals, single-copy sales <sup>84</sup> -----	1982--	963.8	39	60	79	93	546
2721C	General and consumer periodicals, advertising (1977 product class 27216) -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	3 161.8 1 595.5 889.0 879.5 710.6 543.9	42 32 40 48 53 59	58 50 60 67 72 73	79 80 84 90 92 91	93 93 94 97 97 98	867 (NA) (NA) (NA) (NA) (NA) (NA)
2721D	Other periodicals, except shopping news, directories, or catalogs, n.e.c. (1977 product class 27217) -----	1982-- 1977-- 1972-- 1967-- 1963--	509.8 250.7 282.1 284.2 230.2	41 (S) (S) 30 35	54 (S) 45 44 46	74 (S) 65 65 64	91 (S) 84 84 81	621 (NA) (NA) (NA) (NA) (NA)
27210	Periodical publishing, n.s.k. -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	1 546.6 601.8 201.1 179.5 48.5 39.6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2731-	Book publishing-----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	7 812.6 5 007.7 2 915.4 2 255.3 1 547.8 1 010.7	16 16 16 16 18 16	27 29 27 27 29 26	53 54 52 52 52 45	73 73 75 75 73 65	168 (NA) (NA) (NA) (NA) (NA) (NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
27	PRINTING AND PUBLISHING—Con.						
2731-	Book publishing—Con.						
	1954..	665.4	18	28	47	(NA)	(NA)
27311	Textbooks, including teachers' editions -----	1982.. 2 167.9 1977.. 1 408.7 1972.. 809.6 1967.. 733.6 1963.. 471.1 1958.. 281.7	36 35 33 29 32 33	55 57 54 50 54 50	83 80 80 79 81 76	96 95 95 94 94 93	503 (NA) (NA) (NA) (NA) (NA) (NA)
27313	Technical, scientific, and professional books -----	1982.. 1 359.6 1977.. 684.1 1972.. 403.0 1967.. 240.2 1963.. 156.3 1958.. 116.0	37 40 39 38 32 27	56 55 57 54 49 43	79 75 76 74 68 71	92 89 92 91 87 91	522 (NA) (NA) (NA) (NA) (NA) (NA)
27314	Religious books -----	1982.. 322.1 1977.. <sup>85</sup> 236.3 1972.. <sup>85</sup> 131.2 1967.. <sup>85</sup> 110.4 1963.. <sup>85</sup> 81.1 1958.. <sup>85</sup> 58.6	32 26 36 27 22 30	49 42 51 46 37 45	73 68 76 74 65 70	96 91 97 96 89 90	436 (NA) (NA) (NA) (NA) (NA) (NA)
2731A	Mass market paperbound books, rack size <sup>86</sup> -----	1982.. 553.4	70	97	100	(X)	1 794
2731B	Book club books <sup>86</sup> -----	1982.. 417.9	72	91	99+	100	1 972
2731C	Mail order books <sup>86</sup> -----	1982.. 508.6	81	94	99	100	2 675
2731D	Adult trade and juvenile books <sup>86</sup> -----	1982.. 1 111.4	35	54	75	95	463
2731E	General reference books (1977 product class 27317) -----	1982.. 299.0 1977.. <sup>85</sup> 305.4 1972.. <sup>85</sup> 235.2 1967.. <sup>87</sup> 216.3 1963.. <sup>87</sup> 207.3	66 62 71 81 87	77 74 82 91 96	90 92 94 (D) 100	99 99 99+ 100 (X)	1 694 (NA) (NA) (NA) (NA) (NA)
2731F	Other books, excluding pamphlets (1977 product class 27318) <sup>11</sup> -----	1982.. 218.5 1977.. 110.4 1972.. 125.4	51 49 54	65 64 65	86 87 85	99 98 99	1 452 (NA) (NA)
2731G	Pamphlets (5 to 48 pages) (1977 product class 27319) <sup>11</sup> -----	1982.. 75.4 1977.. 49.1 1972.. 48.7	74 54 62	85 74 73	98 89 87	100 99 99	1 659 (NA) (NA)
27310	Book publishing, n.s.k. -----	1982.. 778.7 1977.. 318.1 1972.. 155.6 1967.. 97.0 1963.. 18.9 1958.. 20.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2732-	Book printing -----	1982.. 2 501.9 1977.. 1 830.6 1972.. 1 050.0 1967.. 900.3 1963.. 607.0 1958.. 422.9 1954.. 304.9	25 21 19 15 14 15 15	33 29 27 23 23 22 24	47 42 44 38 37 34 37	62 55 57 53 51 48 (NA)	242 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
27323	Textbooks, printing and binding <sup>88</sup> -----	1982.. 335.1	44	63	87	97	672
27324	Technical, scientific, and professional books (printing and binding) <sup>88</sup> -----	1982.. 289.5	28	41	60	81	291
27325	Religious books, printing and binding <sup>88</sup> -----	1982.. 107.3	51	62	82	96	823
27326	General books (trade, etc.), printing and binding <sup>88</sup> -----	1982.. 615.4	45	60	84	96	826
2732A	Other books, n.e.c., printing and binding <sup>88</sup> -----	1982.. 383.6	58	72	90	97	1 095
2732B	Books, printing only, not bound <sup>88</sup> -----	1982.. 111.8	28	45	67	88	339
2732C	Pamphlets, printing only or printing and binding <sup>88</sup> -----	1982.. 200.8	18	25	40	61	144
27320	Book printing, n.s.k. -----	1982.. 458.4 1977.. 160.5 1972.. 109.4 1967.. 45.0 1963.. 21.1 1958.. 6.9	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2741-	Miscellaneous publishing -----	1982.. 3 096.6 1977.. 1 935.1 1972.. 1 058.3 1967.. 608.6 1963.. 413.4 1958.. 297.9	22 23 29 27 29 (NA)	29 32 42 44 42 (NA)	43 47 55 61 57 (NA)	55 60 64 72 68 (NA)	213 (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
27	PRINTING AND PUBLISHING—Con.							
2741-	Miscellaneous publishing—Con.	1954--	231.1	28	39	52	(NA)	(NA)
27411	Catalogs and directories, publishing -----	1982--	882.7	54	66	78	89	1 044
		1977--	456.9	55	68	82	92	(NA)
		1972--	244.1	63	75	86	94	(NA)
		1967--	184.6	61	75	85	94	(NA)
		1963--	133.0	56	69	78	87	(NA)
		1958--	93.6	58	68	80	90	(NA)
27412	Business service publications, publishing -----	1982--	535.5	55	72	89	96	1 199
		1977--	416.7	64	78	88	95	(NA)
		1972--	241.9	65	77	90	99	(NA)
		1967--	123.0	69	84	93	99+	(NA)
		1963--	101.6	65	81	93	99+	(NA)
27414	Patterns, including clothing patterns <sup>89</sup> -----	1982--	181.8	94	99	100	(X)	2 838
27415	Other miscellaneous publishing <sup>89</sup> -----	1982--	1 010.5	18	25	37	56	126
27410	Miscellaneous publishing, n.s.k. -----	1982--	486.0	(X)	(X)	(X)	(X)	(X)
		1977--	334.5	(X)	(X)	(X)	(X)	(NA)
		1972--	171.2	(X)	(X)	(X)	(X)	(NA)
		1967--	69.2	(X)	(X)	(X)	(X)	(NA)
		1963--	20.6	(X)	(X)	(X)	(X)	(NA)
		1958--	8.1	(X)	(X)	(X)	(X)	(NA)
2751-	Commercial printing, letterpress -----	1982--	6 029.8	5	8	14	22	13
		1977--	4 620.6	9	13	20	28	(NA)
		1972--	3 405.3	9	13	19	28	(NA)
		1967--	<sup>903</sup> 265.0	12	17	24	33	(NA)
		1963--	<sup>902</sup> 711.4	12	17	25	34	(NA)
27511	Magazine and periodical printing (letterpress) -----	1982--	267.2	46	63	81	90	738
		1977--	499.7	60	85	93	97	(NA)
		1972--	424.3	59	71	82	91	(NA)
		1967--	512.7	42	55	70	82	(NA)
		1963--	574.0	40	52	70	81	(NA)
		1958--	452.7	36	48	64	(NA)	(NA)
27512	Labels and wrappers, printing (letterpress) -----	1982--	1 079.4	14	22	37	56	101
		1977--	746.9	17	26	40	61	(NA)
		1972--	502.4	20	28	44	63	(NA)
		1967--	390.2	16	25	40	59	(NA)
		1963--	296.9	15	23	40	60	(NA)
		1958--	263.1	13	20	34	(NA)	(NA)
27513	Catalogs and directories, printing (letterpress) -----	1982--	224.0	78	86	91	96	1 765
		1977--	197.7	72	83	88	93	(NA)
		1972--	134.3	53	74	85	91	(NA)
		1967--	171.3	40	54	66	74	(NA)
		1963--	148.7	40	55	69	76	(NA)
		1958--	139.9	37	49	66	(NA)	(NA)
27514	Financial and legal printing (letterpress) -----	1982--	239.4	37	51	69	86	527
		1977--	208.4	29	43	64	81	(NA)
		1972--	190.1	33	45	65	80	(NA)
		1967--	152.9	19	28	42	60	(NA)
		1963--	111.3	15	25	37	53	(NA)
		1958--	76.8	20	30	43	(NA)	(NA)
27515	Advertising printing (letterpress) -----	1982--	337.5	27	37	50	64	241
		1977--	299.8	24	33	47	60	(NA)
		1972--	268.7	14	20	34	48	(NA)
		1967--	345.7	7	11	18	29	(NA)
		1963--	276.4	8	12	20	31	(NA)
		1958--	348.7	6	10	17	(NA)	(NA)
27516	Other general job printing (letterpress) -----	1982--	798.2	11	20	33	50	77
		1977--	721.4	12	19	31	45	(NA)
		1972--	522.7	15	20	28	40	(NA)
		1967--	527.7	7	10	16	25	(NA)
		1963--	717.1	4	7	12	19	(NA)
		1958--	643.2	4	7	12	(NA)	(NA)
27519	Screen process printing, except textiles -----	1982--	696.9	11	16	27	44	63
		1977--	314.7	10	17	32	52	(NA)
		1972--	172.1	15	21	34	56	(NA)
		1967--	93.3	13	20	35	57	(NA)
		1963--	69.2	13	20	33	51	(NA)
		1958--	53.2	12	17	29	50	(NA)
27510	Commerical printing, letterpress, n.s.k. -----	1982--	2 387.2	(X)	(X)	(X)	(X)	(X)
		1977--	1 632.0	(X)	(X)	(X)	(X)	(NA)
		1972--	1 190.7	(X)	(X)	(X)	(X)	(NA)
		1967--	640.8	(X)	(X)	(X)	(X)	(NA)
		1963--	213.1	(X)	(X)	(X)	(X)	(NA)
		1958--	231.6	(X)	(X)	(X)	(X)	(NA)
2752-	Commercial printing, lithographic -----	1982--	18 777.9	6	10	16	23	19
		1977--	8 980.2	6	10	16	25	(NA)
		1972--	4 919.8	5	8	15	24	(NA)
		1967--	<sup>913</sup> 132.9	10	13	20	28	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
27	PRINTING AND PUBLISHING—Con.						
2752-	Commercial printing, lithographic—Con.						
	1963--	9 <sup>12</sup> 025.2	5	9	15	23	(NA)
27521	Magazine and periodical printing (lithographic)-----	1982-- 2 536.2	30	40	54	71	314
	1977-- 1 287.5	22	32	49	67	(NA)	
	1972-- 631.6	22	32	50	68	(NA)	
	1967-- 296.1	15	25	46	65	(NA)	
	1963-- 138.5	18	25	41	62	(NA)	
27522	Labels and wrappers, printing (lithographic)-----	1982-- 677.0	17	27	46	65	142
	1977-- 391.3	22	34	51	68	(NA)	
	1972-- 280.3	24	37	57	73	(NA)	
	1967-- 186.9	28	38	55	71	(NA)	
	1963-- 147.3	25	35	51	68	(NA)	
	1958-- 123.4	26	38	56	76	(NA)	
27523	Catalogs and directories, printing (lithographic)-----	1982-- 1 804.2	24	33	46	62	212
	1977-- 838.3	20	30	44	60	(NA)	
	1972-- 464.1	19	27	41	57	(NA)	
	1967-- 267.7	19	25	38	54	(NA)	
	1963-- 165.3	18	24	35	49	(NA)	
	1958-- 75.6	19	26	39	54	(NA)	
27524	Financial and legal printing (lithographic)-----	1982-- 957.5	31	45	56	67	309
	1977-- 471.6	26	37	49	63	(NA)	
	1972-- 271.1	25	35	48	62	(NA)	
	1967-- 137.7	24	33	48	65	(NA)	
	1963-- 108.9	24	31	46	62	(NA)	
	1958-- 50.0	38	47	61	75	(NA)	
27525	Advertising printing (lithographic)-----	1982-- 4 985.1	12	15	22	31	50
	1977-- 2 407.7	7	11	18	29	(NA)	
	1972-- 1 554.1	6	10	16	26	(NA)	
	1967-- 967.6	6	9	16	28	(NA)	
	1963-- 721.6	6	9	16	26	(NA)	
	1958-- 577.3	6	9	16	27	(NA)	
27526	Other general job printing (lithographic)-----	1982-- 3 343.3	9	14	20	29	33
	1977-- 2 178.1	14	20	28	38	(NA)	
	1972-- 967.8	8	12	20	32	(NA)	
	1967-- 705.6	35	39	46	56	(NA)	
27520	Commercial printing, lithographic (offset), n.s.k.-----	1982-- 4 474.6	(X)	(X)	(X)	(X)	(X)
	1977-- 1 405.7	(X)	(X)	(X)	(X)	(NA)	
	1972-- 750.8	(X)	(X)	(X)	(X)	(NA)	
	1967-- 420.1	(X)	(X)	(X)	(X)	(NA)	
	1963-- 96.3	(X)	(X)	(X)	(X)	(NA)	
	1958-- 33.2	(X)	(X)	(X)	(X)	(NA)	
2753-	Engraving and plate printing-----	1982-- 603.7	21	27	37	50	178
	1977-- 288.7	31	40	51	65	(NA)	
	1972-- 205.0	23	28	38	52	(NA)	
	1967-- 151.3	16	21	31	46	(NA)	
	1963-- 111.2	23	29	40	53	(NA)	
	1958-- 93.7	25	30	40	53	(NA)	
	1954-- 70.4	20	26	36	(NA)	(NA)	
27531	Engraving <sup>92</sup> -----	1982-- 228.2	34	44	58	75	603
27532	Engraved or etched printing plates made for others <sup>92</sup> -----	1982-- 213.5	30	37	51	73	463
27530	Engraving and plate printing, n.s.k. <sup>92</sup> -----	1982-- 162.0	(X)	(X)	(X)	(X)	(X)
2754-	Commercial printing, gravure <sup>93</sup> -----	1982-- 2 248.9	46	60	76	88	868
	1977-- 1 166.3	36	50	71	85	(NA)	
	1972-- 759.1	37	53	74	90	(NA)	
27541	Magazine and periodical printing (gravure) <sup>11</sup> -----	1982-- 521.0	56	91	(D)	(D)	1 142
	1977-- 275.5	61	87	100	(X)	(NA)	
27542	Labels and wrappers, printing (gravure)-----	1982-- 437.4	36	52	80	99	485
	1977-- 276.2	44	61	89	99+	(NA)	
	1972-- 189.9	50	71	91	99+	(NA)	
27543	Catalogs and directories, printing (gravure) <sup>11</sup> -----	1982-- 651.2	98	(D)	(D)	(X)	(D)
	1977-- 233.5	(D)	99+	100	(X)	(NA)	
27545	Advertising printing (gravure)-----	1982-- 286.4	87	98	99+	100	2 316
	1977-- 143.2	78	91	98	99+	(NA)	
	1972-- 100.9	68	81	94	99+	(NA)	
27546	Other commercial printing (gravure) <sup>94</sup> -----	1982-- 102.7	51	71	95	100	867
	1977-- 91.5	61	74	91	99+	(NA)	
27547	Gravure plates and cylinders-----	1982-- 89.9	42	62	88	100	804
	1977-- 58.0	38	58	93	100	(NA)	
	1972-- 33.7	50	71	94	100	(NA)	
27540	Commercial printing, gravure, n.s.k.-----	1982-- 160.4	(X)	(X)	(X)	(X)	(X)
	1977-- 88.4	(X)	(X)	(X)	(X)	(NA)	
	1972-- 32.1	(X)	(X)	(X)	(X)	(NA)	
2761-	Manifold business forms-----	1982-- 4 812.2	35	46	63	76	550
	1977-- 2 702.6	39	47	61	75	(NA)	
	1972-- 1 381.9	43	51	63	75	(NA)	
	1967-- 895.8	45	54	66	78	(NA)	

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
27	PRINTING AND PUBLISHING—Con.							
2761-	Manifold business forms—Con.	1963..	598.4	46	52	65	76	(NA)
27612	Unit set forms -----	1982..	1 187.7	32	43	56	68	466
		1977..	885.3	32	42	54	67	(NA)
		1972..	514.2	35	44	57	70	(NA)
		1967..	347.4	35	46	59	74	(NA)
		1963..	258.0	32	43	57	71	(NA)
		1958..	159.6	38	46	58	73	(NA)
27613	Manifold books -----	1982..	238.5	51	69	88	98	910
		1977..	129.5	54	78	91	97	(NA)
		1972..	51.5	55	71	89	95	(NA)
		1967..	44.2	60	78	91	97	(NA)
		1963..	39.6	58	76	91	98	(NA)
27615	Custom continuous forms <sup>11</sup> -----	1982..	1 731.6	46	58	72	84	764
		1977..	896.0	50	62	77	91	(NA)
		1972..	553.6	52	61	75	88	(NA)
27617	Stock continuous forms <sup>11</sup> -----	1982..	1 270.4	48	65	91	99	958
		1977..	622.2	48	62	84	96	(NA)
		1972..	204.9	66	75	86	96	(NA)
27610	Manifold business forms, n.s.k. -----	1982..	384.0	(X)	(X)	(X)	(X)	(X)
		1977..	169.7	(X)	(X)	(X)	(X)	(NA)
		1972..	57.8	(X)	(X)	(X)	(X)	(NA)
		1967..	24.0	(X)	(X)	(X)	(X)	(NA)
		1963..	9.8	(X)	(X)	(X)	(X)	(NA)
2771-	Greeting card publishing -----	1982..	1 395.2	80	84	92	97	2 660
		1977..	765.2	70	78	88	95	(NA)
		1972..	574.6	64	74	84	93	(NA)
		1967..	441.4	62	73	82	91	(NA)
		1963..	310.2	53	67	79	90	(NA)
		1958..	276.6	43	59	72	85	(NA)
		1954..	217.5	37	51	66	(NA)	(NA)
27711	Greeting cards, publishers' sales -----	1982..	1 254.8	88	93	99	100	(D)
		1977..	694.3	77	86	96	100	(NA)
		1972..	501.9	71	82	93	99	(NA)
		1967..	381.4	70	82	91	99	(NA)
		1963..	262.8	60	76	87	97	(NA)
		1958..	234.0	48	64	79	93	(NA)
		1954..	185.0	44	60	76	(NA)	(NA)
27712	Greeting cards, printed for publication by others -----	1982..	88.0	39	59	84	98	621
		1977..	39.6	44	64	87	98	(NA)
		1972..	48.9	43	57	79	97	(NA)
		1967..	44.0	29	45	73	95	(NA)
		1963..	39.9	38	49	70	91	(NA)
		1958..	37.9	40	53	70	87	(NA)
		1954..	31.0	27	38	60	(NA)	(NA)
27710	Greeting cards, publishing, n.s.k. -----	1982..	52.4	(X)	(X)	(X)	(X)	(X)
		1977..	31.3	(X)	(X)	(X)	(X)	(NA)
		1972..	23.8	(X)	(X)	(X)	(X)	(NA)
		1967..	16.0	(X)	(X)	(X)	(X)	(NA)
		1963..	7.5	(X)	(X)	(X)	(X)	(NA)
		1958..	4.7	(X)	(X)	(X)	(X)	(NA)
2782-	Blankbooks and looseleaf binders -----	1982..	1 874.6	41	51	68	83	819
		1977..	1 039.5	38	49	65	79	(NA)
		1972..	566.2	37	48	60	75	(NA)
		1967..	362.3	32	41	56	73	(NA)
		1963..	252.0	31	40	52	70	(NA)
		1958..	213.6	26	38	49	64	(NA)
27823	Checkbooks <sup>95</sup> -----	1982..	776.6	92	97	99+	100	(D)
27824	Blankbook making, except checkbooks <sup>95</sup> -----	1982..	279.5	46	70	92	100	785
27825	Looseleaf binders and devices (1977 product class 27822) -----	1982..	652.8	24	42	64	85	292
		1977..	346.3	32	45	63	82	(NA)
		1972..	209.9	34	46	64	82	(NA)
		1967..	153.8	29	42	65	84	(NA)
		1963..	119.6	31	45	67	85	(NA)
		1958..	95.2	36	48	66	84	(NA)
		1954..	70.5	27	42	63	(NA)	(NA)
27820	Blankbooks and looseleaf binders, n.s.k. ....	1982..	165.7	(X)	(X)	(X)	(X)	(X)
		1977..	87.5	(X)	(X)	(X)	(X)	(NA)
		1972..	36.2	(X)	(X)	(X)	(X)	(NA)
		1967..	21.7	(X)	(X)	(X)	(X)	(NA)
		1963..	8.1	(X)	(X)	(X)	(X)	(NA)
2789-	Bookbinding and related work -----	1982..	765.9	9	14	24	38	44
		1977..	508.0	10	17	29	44	(NA)
		1972..	362.6	11	18	29	46	(NA)
		1967..	337.5	12	19	31	47	(NA)
		1963..	243.2	11	18	28	44	(NA)

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
27	PRINTING AND PUBLISHING—Con.						
2789-	Bookbinding and related work—Con.						
	1958...	191.0	10	15	26	42	(NA)
27891	Edition, library, and other hardcover bookbinding -----	1982... 183.0	25	43	62	85	292
	1977... 172.3	24	38	62	85	(NA)	(NA)
	1972... 142.0	26	38	59	82	(NA)	(NA)
	1967... 167.4	23	37	60	80	(NA)	(NA)
	1963... 109.3	25	37	58	78	(NA)	(NA)
	1958... 83.3	23	35	57	76	(NA)	(NA)
27892	Other book and pamphlet binding, related binding work -----	1982... 435.8	14	19	30	47	85
	1977... 253.3	14	19	32	51	(NA)	(NA)
	1972... 164.8	15	23	37	58	(NA)	(NA)
	1967... 135.4	8	14	28	50	(NA)	(NA)
	1963... 117.6	9	15	26	43	(NA)	(NA)
	1958... 95.8	7	13	24	41	(NA)	(NA)
27890	Bookbinding and related work, n.s.k. -----	1982... 147.1	(X)	(X)	(X)	(X)	(X)
	1977... 82.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1972... 55.7	(X)	(X)	(X)	(X)	(X)	(NA)
	1967... 34.7	(X)	(X)	(X)	(X)	(X)	(NA)
	1963... 16.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1958... 11.9	(X)	(X)	(X)	(X)	(X)	(NA)
27910	Typesetting -----	1982... 1 330.9	6	9	14	23	18
	1977... 781.5	5	8	15	26	(NA)	(NA)
	1972... 508.7	5	9	16	29	(NA)	(NA)
	1967... 362.1	6	9	17	29	(NA)	(NA)
	1963... 249.6	5	9	16	29	(NA)	(NA)
	1958... 175.5	4	8	16	30	(NA)	(NA)
	1954... 132.1	4	8	16	(NA)	(NA)	(NA)
27930	Photoengraving plates made for others -----	1982... 96160.7	9616	9624	9638	9659	118
	1977... 223.5	12	21	38	55	(NA)	(NA)
	1972... 221.1	9	15	26	43	(NA)	(NA)
	1967... 237.1	8	14	24	39	(NA)	(NA)
	1963... 214.7	8	13	22	36	(NA)	(NA)
	1958... 208.5	7	12	23	35	(NA)	(NA)
	1954... 176.1	6	10	19	(NA)	(NA)	(NA)
27940	Electrotyping and stereotyping duplicate plates made for others -----	1982... (96)	(96)	(96)	(96)	(96)	(NA)
	1977... 15.6	41	58	78	97	(NA)	(NA)
	1972... 35.5	33	45	66	90	(NA)	(NA)
	1967... 61.4	29	40	58	81	(NA)	(NA)
	1963... 71.9	28	36	53	75	(NA)	(NA)
	1958... 81.5	26	32	45	65	(NA)	(NA)
	1954... 84.4	21	29	43	(NA)	(NA)	(NA)
2795-	Lithographic platemaking services (1967 product class 27527) <sup>97</sup> -----	1982... 1 173.1	15	20	30	44	84
	1977... 630.7	14	19	28	42	(NA)	(NA)
	1972... 263.0	17	24	35	52	(NA)	(NA)
	1967... 151.2	34	43	57	74	(NA)	(NA)
	1963... 129.5	26	31	42	57	(NA)	(NA)
	1958... 68.0	11	18	29	47	(NA)	(NA)
27951	Lithographic plates <sup>97</sup> -----	1982... 277.9	43	54	67	78	620
	1977... 183.6	34	45	61	77	(NA)	(NA)
	1972... 112.4	33	43	59	75	(NA)	(NA)
27952	Lithographic platemaking services <sup>97</sup> -----	1982... 748.3	13	20	31	51	89
	1977... 403.3	10	14	25	42	(NA)	(NA)
	1972... 131.6	13	19	33	56	(NA)	(NA)
27950	Lithographic plates and platemaking services, n.s.k. <sup>97</sup> -----	1982... 146.9	(X)	(X)	(X)	(X)	(X)
	1977... 43.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972... 19.0	(X)	(X)	(X)	(X)	(X)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS						
2812-	Alkalies and chlorine -----	1982... 2 346.1	44	66	97	100	720
	1977... 1 786.7	44	72	96	99+	(NA)	(NA)
	1972... 805.7	54	79	97	99+	(NA)	(NA)
	1967... 623.0	53	81	96	100	(NA)	(NA)
	1963... 526.5	56	84	98	100	(NA)	(NA)
	1958... 425.4	61	88	99	100	(NA)	(NA)
	1954... 362.7	63	88	99	(NA)	(NA)	(NA)
28121	Chlorine, compressed or liquefied -----	1982... 440.8	49	71	99	100	862
	1977... 520.0	49	71	99	100	(NA)	(NA)
	1972... 210.2	46	73	97	100	(NA)	(NA)
	1967... 190.8	52	79	99	100	(NA)	(NA)
	1963... 164.0	51	79	99	100	(NA)	(NA)
	1958... 117.4	52	82	99	100	(NA)	(NA)
	1954... 87.2	54	82	99	(NA)	(NA)	(NA)
28123	Sodium hydroxide (caustic soda) -----	1982... 1 584.2	50	74	99+	100	902
	1977... 997.0	50	72	98	100	(NA)	(NA)
	1972... 410.9	55	78	98	100	(NA)	(NA)
	1967... 254.9	51	81	99	100	(NA)	(NA)
	1963... 209.7	51	81	99	100	(NA)	(NA)
	1958... 177.3	55	85	(D)	100	(NA)	(NA)
	1954... 148.8	57	87	99	(NA)	(NA)	(NA)
28125	Other alkalies <sup>98</sup> -----	1982... 294.0	80	95	100	(X)	2 348

See footnotes at end of table.

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2812- 28120	Alkalies and chlorine—Con. Alkalies and chlorine, n.s.k. -----	1982-- 27.1 1977-- 6.7 1972-- 3.3 1967-- 1.3 1963-- 1.5	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(D) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
2813-	Industrial gases -----	1982-- 2 002.2 1977-- 1 199.1 1972-- 659.1 1967-- 543.4 1963-- 389.6 1958-- 262.6 1954-- 195.4	71 65 67 65 71 78 77	84 81 80 79 83 84 83	92 90 92 90 92 91 90	97 96 97 96 97 96 (NA)	1 439 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28132	Acetylene -----	1982-- 136.0 1977-- 127.9 1972-- 96.0 1967-- 83.2 1963-- 93.5 1958-- 89.4 1954-- 64.6	72 65 77 80 87 (D) 90	89 85 89 89 92 93 93	96 97 98 96 97 97 97	100 100 100 100 99+ 99 (NA)	1 528 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28133	Carbon dioxide -----	1982-- 207.5 1977-- 103.0 1972-- 45.7 1967-- 48.0 1963-- 49.9 1958-- 43.0 1954-- 43.4	63 75 75 73 78 80 80	79 84 86 86 89 89 90	94 96 98 96 98 98 99	100 100 100 100 100 100 (NA)	1 249 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28135	Nitrogen <sup>11</sup> -----	1982-- 632.0 1977-- 278.7	85 80	97 98	99+ 99+	100 100	1 982 (NA)
28136	Oxygen <sup>11</sup> -----	1982-- 578.3 1977-- 375.1	86 81	96 95	99+ 99+	100 100	2 223 (NA)
28137	Other elemental, compressed, and liquefied gases, n.e.c. <sup>11</sup> -----	1982-- 376.5 1977-- 268.0	70 64	82 75	95 91	100 99+	1 685 (NA)
28130	Industrial gases, n.s.k. -----	1982-- 71.9 1977-- 46.4 1972-- 30.3 1967-- 21.4 1963-- 1.7	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2816-	Inorganic pigments -----	1982-- 1 590.7 1977-- 1 339.2 1972-- 757.5 1967-- 560.8 1963-- 480.4 1958-- 412.0	48 52 52 58 66 67	66 71 71 74 79 80	88 89 89 92 93 93	97 98 97 99 99 99	1 036 (NA) (NA) (NA) (NA) (NA) (NA)
28161	Titanium pigments -----	1982-- 845.8 1977-- 627.1 1972-- 355.6 1967-- 298.4 1963-- 277.3 1958-- 231.9	(D) 81 80 88 (D) (D)	(D) (D) 99+ 99+ 100 100	100 100 100 100 (X) (X)	(X) (X) (X) (X) (X) (X)	2 959 (NA) (NA) (NA) (NA) (NA) (NA)
28162	Other white opaque pigments -----	1982-- 189.3 1977-- 204.8 1972-- 100.0 1967-- 65.4 1963-- 50.4 1958-- 54.4	62 67 69 65 64 64	80 85 90 91 90 88	99+ (D) 99+ 100 (D) 99	100 100 100 (X) 100 100	1 224 (NA) (NA) (NA) (NA) (NA) (NA)
28163	Chrome colors and other inorganic pigments -----	1982-- 529.3 1977-- 485.0 1972-- 283.2 1967-- 189.3 1963-- 151.8 1958-- 125.1	43 47 47 49 45 47	65 65 64 68 62 64	88 90 87 91 85 86	99+ 99+ 99+ 99+ 98 98	705 (NA) (NA) (NA) (NA) (NA) (NA)
28160	Inorganic pigments, n.s.k. -----	1982-- 26.3 1977-- 22.3 1972-- 18.8 1967-- 7.6 1963-- .9 1958-- .6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2819-	Industrial inorganic chemicals, n.e.c. <sup>99</sup> -----	1982-- 9 698.2 1977-- 6 920.3 1972-- 2 989.1	21 23 27	36 39 46	58 64 70	79 83 86	226 (NA) (NA)
28193	Sulfuric acid -----	1982-- 586.0 1977-- 427.1 1972-- 245.4 1967-- 250.6 1963-- 193.9 1958-- 169.9 1954-- 161.2	53 52 55 54 60 58 (D)	72 66 73 72 75 76 78	90 84 90 88 90 90 92	99+ 99+ 99+ 99+ 99+ 99 (NA)	1 009 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28194	Inorganic acids, except nitric, sulfuric, and phosphoric <sup>99</sup> -----	1982-- 478.6 1977-- 364.4 1972-- 160.5	53 61 56	69 80 71	90 95 93	99+ 100 99+	975 (NA) (NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2819- 28195	Industrial inorganic chemicals, n.e.c. <sup>99</sup> —Con. Aluminum oxide -----	1982... 844.2 1977... 827.3 1972... 388.6 1967... 100529.6 1963... 100422.4 1958... 100284.6 1954... 100234.8	97 (D) 99 85 85 88 89	(D) 100 99+ 95 95 96 96	(D) (X) 100 99 99 99 99	(X) (X) (X) (X) (X) (X) (X)	2 767 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28196	Other aluminum compounds <sup>100</sup> -----	1982... 376.8 1977... 312.3 1972... 175.5	62 69 71	85 88 92	99 99 100	100 100 (X)	1 387 (NA) (NA)
28197	Potassium and sodium compounds, n.e.c. -----	1982... 1 462.8 1977... 1 102.8 1972... 503.1 1967... 455.7 1963... 513.3	49 48 51 46 43	71 69 73 66 67	91 89 90 86 94	99 99 99+ 99+ 99+	802 (NA) (NA) (NA) (NA)
28198	Chemical catalytic preparations -----	1982... 676.5 1977... 398.1 1972... 172.8 1967... 123.1 1963... 75.2 1958... 56.2	60 49 38 46 50 61	82 70 63 72 70 78	99 97 93 96 97 99	100 100 100 100 100 100	1 155 (NA) (NA) (NA) (NA) (NA) (NA)
28199	Other inorganic chemicals, n.e.c.-----	1982... 4 790.7 1977... 3 375.3 1972... 1 320.8 1967... 101 035.5 1963... 101825.8	20 25 27 29 29	34 41 43 44 44	63 65 66 70 68	84 87 88 90 88	245 (NA) (NA) (NA) (NA) (NA)
28190	Industrial inorganic chemicals, n.e.c., n.s.k.-----	1982... 482.6 1977... 112.8 1972... 22.5 1967... 38.9 1963... 11.1	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
2821-	Plastics materials and resins <sup>102</sup> -----	1982... 17 614.8 1977... 12 181.1 1972... 4 484.3	24 24 25	36 38 38	64 61 62	89 87 87	273 (NA) (NA)
28213	Thermoplastic resins and plastics materials -----	1982... 14 251.6 1977... 9 897.7 1972... 3 571.4 1967... 1031 924.8 1963... 1031 302.0	25 25 29 36 43	40 41 44 52 59	72 67 70 80 83	94 92 92 97 98	332 (NA) (NA) (NA) (NA)
28214	Thermosetting resins and plastics materials -----	1982... 2 877.9 1977... 2 225.7 1972... 905.0 1967... 103544.8 1963... 103420.0	28 29 29 29 41	44 45 46 48 60	72 72 74 74 80	93 92 93 94 96	357 (NA) (NA) (NA) (NA)
28210	Plastics materials and resins, n.s.k. -----	1982... 485.3 1977... 56.7 1972... 4.7 1967... 39.4 1963... 8.7 1958... 1.4	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
28220	Synthetic rubber (vulcanizable elastomers) -----	1982... 3 212.2 1977... 2 354.1 1972... 1 288.6 1967... 1 004.9 1963... 862.3 1958... 603.9 1954... 392.2	45 56 54 49 52 54 52	69 78 73 70 73 75 79	97 96 95 98 99 (D) 100	99+ 99+ 99+ 100 100 100 (X)	805 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28230	Rayon and acetate fibers (1977 product class 28233) -----	1982... 1 114.8 1977... 851.1 1972... 684.7 1967... 681.1 1963... 648.9 1958... 582.9	(D) (D) 84 79 79 71	(D) 100 99+ 99 (D) (D)	100 (X) 100 100 100 (D)	(X) (X) (X) (X) (X) (X)	2 292 (NA) (NA) (NA) (NA) (NA) (NA)
2824-	Organic fibers, noncellulosic-----	1982... 7 149.8 1977... 5 471.5 1972... 1042 949.1 1967... 1041 974.1 1963... 1041 368.9 1958... 104748.3 1954... 104561.6	75 76 73 82 (D) (D) (D)	90 90 87 93 96 (D) (D)	99 99 98 99+ 99+ 100 100	100 100 100 100 100 (X) (X)	2 196 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28241	Nylon fibers, except producer textured-----	1982... 1 891.1 1977... 1 962.9 1972... 1 251.8 1967... 1 068.4 1963... 896.1	94 90 80 91 (D)	(D) 99 95 99 (D)	(D) 100 100 100 100	(X) (X) (X) (X) (X)	(D) (NA) (NA) (NA) (NA)
28243	Acrylic and modacrylic, except producer textured <sup>11</sup> -----	1982... 595.5 1977... 495.8	(D) (D)	(D) 100	(X) (X)	(X) (X)	2 902 (NA)
28244	Polyester, except producer textured <sup>11</sup> -----	1982... 2 679.1 1977... 1 938.6	89 90	98 99	100 100	(X) (X)	2 668 (NA)
28245	Other noncellulosic synthetic fibers, except producer textured <sup>11</sup> ----	1982... 445.9 1977... 178.2	88 82	98 96	100 100	(X) (X)	(D) (NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2824- 28246	Organic fibers, noncellulosic—Con. Producer textured noncellulosic synthetic fibers (also see product class 2825) <sup>11</sup> -----	1982... 1977... 1972... 1967...	1 519.7 890.6 18.6 5.4 3.2 .4	71 65 (X) (X) (X) (X)	89 89 (X) (X) (X) (X)	100 100 (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)
28240	Synthetic organic fibers, noncellulosic, n.s.k. -----	1982... 1977... 1972... 1967...	18.6 5.4 3.2 .4	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2831-	Biological products -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	2 416.5 1 067.5 495.2 220.6 167.3 119.5 79.9	27 33 32 33 37 46 37	43 48 54 53 58 66 52	72 72 82 85 87 85 79	90 90 96 97 97 96 (NA)
28311	Blood and blood derivatives for human use -----	1982... 1977... 1972... 1967...	361.0 243.2 126.0 35.9	90 74 67 74	98 95 92 91	100 100 (D) 100	(X) (X) (NA) (X)
28312	Vaccines, toxoids, and antigens for human use -----	1982... 1977... 1972... 1967...	188.0 99.4 70.5 36.6	(D) 90 84 66	(D) (D) 98 92	(X) 100 100 100	(X) (X) (X) (X)
28317	Other biologics for human use, except diagnostics <sup>105</sup> -----	1982...	126.2	86	98	100	(X)
28318	Biological products for veterinary use, except diagnostics <sup>105</sup> -----	1982...	180.8	45	70	95	100
28319	Biological products for industrial and other uses (1977 product class 28316) -----	1982... 1977...	25.2 46.6	75 50	93 70	100 98	(X) 100
2831A	Diagnostics substances, in vivo and in vitro <sup>105</sup> -----	1982...	1 321.8	30	55	85	99
28310	Biological products, n.s.k. -----	1982...	213.5	(X)	(X)	(X)	(X)
2833-	Medicinals and botanicals -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	3 732.7 2 205.9 795.7 593.8 434.0 391.1 282.1	60 57 49 52 51 53 51	70 72 62 66 64 64 66	82 83 82 82 82 82 82	92 92 95 94 94 93 (NA)
28331	Synthetic organic medicinal chemicals in bulk -----	1982... 1977... 1972... 1967... 1963...	3 101.4 1 787.8 635.6 503.7 367.8	71 67 57 61 59	84 84 73 74 72	94 95 90 89 89	99+ 99+ 99 99 98
28333	Other bulk medicinal chemicals and botanical products (1977 product class 28332) -----	1982... 1977... 1972... 1967... 1963...	405.0 313.7 146.1 80.1 64.7	29 34 46 41 31	45 53 70 60 50	70 78 90 84 85	96 98 99+ 98 98
28330	Medicinals and botanicals, n.s.k. -----	1982... 1977... 1972... 1967... 1963... 1958...	226.3 104.4 13.9 10.0 1.5 2.9	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
2834-	Pharmaceutical preparations -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	16 690.5 9 639.5 6 295.7 4 139.7 3 000.2 2 344.6 1 584.7	26 25 25 24 22 25 25	41 41 43 40 37 43 43	67 70 73 70 71 71 66	88 89 89 89 88 86 (NA)
28341	Pharmaceutical preparations affecting neoplasms, the endocrine system, and metabolic diseases, for human use -----	1982... 1977... 1972... 1967... 1963...	1 635.1 905.3 615.4 420.2 259.1	51 49 48 49 53	73 70 70 70 74	94 95 95 93 92	99+ 99+ 99+ 99 98
28342	Pharmaceutical preparations acting on the central nervous system and the sense organs, for human use -----	1982... 1977... 1972... 1967... 1963...	3 758.8 2 254.4 1 634.4 1 137.1 755.8	41 45 43 39 44	59 64 63 64 65	86 87 88 84 83	98 98 98 97 96
28343	Pharmaceutical preparations acting on the cardiovascular system, for human use -----	1982... 1977... 1972... 1967... 1963...	1 836.6 748.4 382.7 207.5 143.6	54 64 57 46 52	72 78 76 64 67	92 93 92 87 86	99+ 99+ 99 98 97

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2834- 28344	Pharmaceutical preparations—Con. Pharmaceutical preparations acting on the respiratory system, for human use -----	1982... 1 588.1 1977... 871.4 1972... 579.2 1967... 361.4 1963... 283.1	38 44 48 41 39	61 66 70 62 58	88 87 90 87 80	98 99 98 96 94	595 (NA) (NA) (NA) (NA) (NA)
28345	Pharmaceutical preparations acting on the digestive or the genito- urinary systems, for human use -----	1982... 1 345.5 1977... 1 080.3 1972... 763.8 1967... 552.1 1963... 402.8	32 29 35 29 30	47 48 53 48 50	79 80 80 74 72	96 97 96 95 92	423 (NA) (NA) (NA) (NA) (NA)
28346	Pharmaceutical preparations acting on the skin, for human use ----	1982... 824.5 1977... 613.1 1972... 348.3 1967... 229.1 1963... 160.3	32 36 35 35 33	51 57 56 51 47	77 78 77 76 70	94 94 93 93 89	436 (NA) (NA) (NA) (NA) (NA)
28347	Vitamin, nutrient, and hematonic preparations, for human use -----	1982... 2 103.5 1977... 1 315.4 1972... 699.2 1967... 378.4 1963... 340.8	43 38 27 31 28	61 55 44 50 49	80 77 69 74 74	96 94 90 91 89	646 (NA) (NA) (NA) (NA) (NA)
28348	Pharmaceutical preparations affecting parasitic and infective diseases, for human use -----	1982... 2 438.6 1977... 1 292.6 1972... 945.8 1967... 664.5 1963... 520.1	43 44 45 41 47	62 66 67 67 72	92 92 93 94 95	99+ 92 99 99 98	915 (NA) (NA) (NA) (NA) (NA)
28349	Pharmaceutical preparations for veterinary use -----	1982... 778.6 1977... 353.3 1972... 240.3 1967... 135.4 1963... 110.4 1958... 87.7	38 40 39 34 37 45	55 56 55 54 56 63	84 87 84 82 79 82	99 99+ 99 98 94 96	527 (NA) (NA) (NA) (NA) (NA) (NA)
28340	Pharmaceutical preparations, n.s.k. -----	1982... 381.0 1977... 205.3 1972... 86.4 1967... 54.1 1963... 24.3 1958... 49.7	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2841-	Soap and other detergents -----	1982... 7 852.3 1977... 4 999.6 1972... 2 861.6 1967... 2 200.8 1963... 1 780.7 1958... 1 463.8	58 58 62 64 68 68	68 67 70 73 76 75	78 77 79 82 83 85	87 86 87 88 90 91	1 378 (NA) (NA) (NA) (NA) (NA) (NA)
28411	Soap and detergents, nonhousehold -----	1982... 1 538.5 1977... 1 005.8 1972... 649.0	38 33 31	50 47 44	67 67 63	81 82 79	577 (NA) (NA) (NA)
28412	Household detergents -----	1982... 4 349.3 1977... 2 817.2 1972... 1 646.0	79 80 84	90 88 90	97 96 97	99+ 99+ 99+	2 735 (NA) (NA) (NA)
28413	Soaps, except specialty cleaners, household -----	1982... 1 220.4 1977... 707.0 1972... 412.0 1967... 332.0 1963... 296.0	74 77 72 77 79	91 88 87 90 91	98 98 96 96 96	99+ 100 99+ 99 99	1 708 (NA) (NA) (NA) (NA) (NA)
28414	Glycerin, natural -----	1982... 153.7 1977... 101.0 1972... 50.4 1967... 48.1 1963... 38.5 1958... 10670.4 1954... 10675.8	84 74 75 71 68 70 71	94 90 92 88 88 89 87	100 (D) 99+ 99 98 98 97	(X) 100 100 100 100 (D) (NA)	(D) (NA) (NA) (NA) (NA) (NA) (NA)
28410	Soaps and other detergents, n.s.k. -----	1982... 590.3 1977... 368.6 1972... 104.2 1967... 73.2 1963... 17.6 1958... 6.8	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2842-	Polishes and sanitation goods <sup>107</sup> -----	1982... 4 047.1 1977... 2 668.5 1972... 1 714.5	33 34 35	48 48 47	61 60 58	73 72 72	375 (NA) (NA) (NA)
28422	Household bleaches -----	1982... 528.4 1977... 353.8 1972... 211.0	(D) 86 75	82 90 82	93 97 92	99+ 97 99+	(D) (NA) (NA)
28423	Specialty cleaning and sanitation products -----	1982... 2 327.8 1977... 1 478.2 1972... 904.5 1967... 528.0 1963... 331.7 1958... 181.5	41 38 36 32 32 29	56 54 55 49 46 40	72 70 69 67 60 58	86 84 86 84 76 73	611 (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.

Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2842- 28424	Polishes and sanitation goods <sup>107</sup> —Con. Polishing preparations and related products -----	1982... 648.0 1977... 505.7 1972... 390.0 1967... 324.5 1963... 278.8 1958... 240.3 1954... 225.6	47 44 47 47 49 44 37	60 56 59 59 57 51 47	74 71 76 74 69 63 62	86 86 88 87 82 78 (NA)	957 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28420	Polishes and sanitation goods, n.s.k. -----	1982... 542.9 1977... 330.8 1972... 209.0 1967... 94.9 1963... 26.5 1958... 28.6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
28430	Surface active agents, finishing agents, and assistants -----	1982... 2 495.7 1977... 1 341.0 1972... 580.6 1967... 403.2 1963... 283.6 1958... 209.8	28 20 19 20 25 26	41 34 33 35 40 42	61 59 56 54 59 63	82 81 80 76 80 83	304 (NA) (NA) (NA) (NA) (NA) (NA)
2844-	Toilet preparations -----	1982... 10 437.1 1977... 6 393.5 1972... 4 244.5 1967... 2 794.2 1963... 1 858.6 1958... 1 126.0	30 37 37 36 33 29	44 51 50 50 50 43	67 70 73 68 70 67	86 87 88 86 87 84	360 (NA) (NA) (NA) (NA) (NA) (NA)
28441	Shaving preparations -----	1982... 328.7 1977... 268.2 1972... 250.4 1967... 178.7 1963... 111.1 1958... 74.9	45 47 57 46 45 58	73 73 77 71 73 80	95 97 96 93 94 96	99 + 99 + 99 + 99 99 99	793 (NA) (NA) (NA) (NA) (NA) (NA)
28442	Perfumes, toilet water, and colognes -----	1982... 1 634.1 1977... 1 096.8 1972... 674.6 1967... 394.9 1963... 208.6 1958... 103.4 1954... 77.0	41 54 48 48 44 34 38	64 69 61 62 58 50 56	88 89 85 83 80 77 79	99 99 97 96 93 92 (NA)	753 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28443	Hair preparations, including shampoos -----	1982... 2 430.0 1977... 1 474.9 1972... 1 065.0 1967... 771.6 1963... 592.7 1958... 315.8 1954... 220.4	42 50 46 48 42 39 51	62 67 63 66 62 57 65	86 88 86 87 83 79 80	96 97 96 97 95 92 (NA)	686 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28444	Dentifrices, including mouthwashes, gargles, and rinses -----	1982... 1 178.9 1977... 659.6 1972... 484.6 1967... 323.1 1963... 228.4 1958... 197.8 1954... 130.8	74 87 79 75 83 75 78	95 97 95 90 94 93 89	99 99 + 99 98 99 98 97	100 100 99 + 99 + 99 99 (NA)	1 695 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28445	Other cosmetics and toilet preparations -----	1982... 4 266.5 1977... 2 597.4 1972... 1 674.0 1967... 1 045.7 1963... 698.2 1958... 418.4	38 39 45 41 42 36	55 56 61 55 55 53	80 79 82 78 77 77	95 95 96 94 92 92	586 (NA) (NA) (NA) (NA) (NA) (NA)
28440	Toilet preparations, n.s.k. -----	1982... 598.9 1977... 296.6 1972... 96.0 1967... 80.2 1963... 19.6 1958... 15.6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2851-	Paints and allied products <sup>6</sup> -----	1982... 8 506.5 1977... 6 123.0 1972... 3 505.8 1967... 2 703.8 1963... 2 298.3 1958... 1 753.9 1954... 1 152.0	24 23 22 23 24 25 27	35 35 33 35 34 34 37	51 51 49 46 47 47 50	64 65 64 59 58 58 (NA)	208 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28511	Architectural coatings, including architectural lacquers <sup>11</sup> -----	1982... 3 076.3 1977... 2 234.0	29 26	46 39	66 61	81 76	334 (NA)
28512	Product finishes for original equipment manufacturers <sup>11</sup> -----	1982... 2 491.8 1977... 1 957.2	30 30	45 47	67 69	82 83	351 (NA)
28513	Special purpose coatings for transportation after market including lacquers <sup>11</sup> -----	1982... 1 380.7 1977... 727.8	44 43	55 56	72 72	87 88	608 (NA)
28515	Miscellaneous allied paint products <sup>108</sup> -----	1982... 801.6	27	36	54	77	264
28510	Paints and allied products, n.s.k. -----	1982... 756.2 1977... 531.1 1972... 325.1 1967... 338.9 1963... 109.1	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2861-	Gum and wood chemicals ----- 1982..	658.5	46	64	85	97	723
	1977..	436.1	46	59	76	92	(NA)
	1972..	300.0	49	64	78	92	(NA)
	1967..	205.1	51	63	76	89	(NA)
	1963..	197.0	44	54	69	86	(NA)
	1958..	151.2	(NA)	(NA)	(NA)	(NA)	(NA)
28611	Softwood distillation products ----- 1982..	167.1	85	98	100	(X)	(D)
	1977..	123.0	91	97	(D)	100	(NA)
	1972..	94.0	90	97	100	(X)	(NA)
	1967..	81.4	85	93	100	(X)	(NA)
	1963..	82.4	(D)	91	99	100	(NA)
	1958..	79.7	80	92	98	99	(NA)
	1954..	61.8	83	94	99	(NA)	(NA)
28612	Other gum and wood chemicals ----- 1982..	481.6	45	65	86	99	802
	1977..	289.0	41	53	76	96	(NA)
	1972..	196.3	36	54	76	95	(NA)
	1967..	111.6	36	50	69	70	(NA)
	1963..	111.4	25	38	60	85	(NA)
	1958..	71.5	27	41	67	88	(NA)
28610	Gum and wood chemicals, n.s.k. ----- 1982..	9.8	(X)	(X)	(X)	(X)	(X)
	1977..	24.1	(X)	(X)	(X)	(X)	(NA)
	1972..	9.7	(X)	(X)	(X)	(X)	(NA)
	1967..	12.2	(X)	(X)	(X)	(X)	(NA)
	1963..	3.2	(X)	(X)	(X)	(X)	(NA)
2865-	Cyclic crudes and intermediates ----- 1982..	7 686.0	34	48	70	90	431
	1977..	5 514.3	36	51	72	91	(NA)
	1972..	2 349.1	35	51	74	93	(NA)
	1967..	1 654.2	40	54	74	93	(NA)
	1963..	1 195.2	44	61	(NA)	(NA)	(NA)
28651	Cyclic intermediates ----- 1982..	5 943.0	42	57	78	96	610
	1977..	4 130.4	44	59	81	98	(NA)
	1972..	1 554.2	43	62	84	97	(NA)
	1967..	1 066.1	47	63	83	97	(NA)
	1963..	758.6	53	68	87	98	(NA)
	1958..	531.5	52	72	90	99	(NA)
	1954..	466.6	55	81	94	(NA)	(NA)
28652	Synthetic organic dyes ----- 1982..	700.2	47	71	97	100	897
	1977..	722.1	43	63	93	100	(NA)
	1972..	474.1	45	66	92	100	(NA)
	1967..	325.6	45	68	94	100	(NA)
	1963..	243.1	48	69	92	99+	(NA)
	1958..	175.5	56	75	92	(D)	(NA)
	1954..	156.3	64	80	94	(D)	(NA)
28653	Synthetic organic pigments, lakes, and toners ----- 1982..	535.3	55	73	96	100	979
	1977..	414.5	48	71	94	100	(NA)
	1972..	224.7	51	73	95	100	(NA)
	1967..	162.2	49	74	97	100	(NA)
	1963..	111.7	51	73	94	100	(NA)
	1958..	80.2	50	74	96	100	(NA)
	1954..	68.4	53	76	95	(NA)	(NA)
28655	Cyclic (coal tar) crudes <sup>109</sup> ----- 1982..	452.8	69	86	99+	100	1 692
	1977..	204.9	97	99	100	(X)	(NA)
	1972..	81.0	92	99	100	(X)	(NA)
	1967..	87.6	95	99	100	(X)	(NA)
	1963..	79.3	95	99	100	(X)	(NA)
	1958..	105.3	89	96	(D)	100	(NA)
	1954..	87.4	89	95	99	(NA)	(NA)
28650	Cyclic crudes and intermediates, n.s.k. ----- 1982..	54.7	(X)	(X)	(X)	(X)	(X)
	1977..	42.4	(X)	(X)	(X)	(X)	(NA)
	1972..	15.1	(X)	(X)	(X)	(X)	(NA)
	1967..	12.7	(X)	(X)	(X)	(X)	(NA)
	1963..	2.5	(X)	(X)	(X)	(X)	(NA)
	1958..	1.2	(X)	(X)	(X)	(X)	(NA)
2869-	Industrial organic chemicals, n.e.c. <sup>6</sup> ----- 1982..	26 714.5	31	48	70	88	395
	1977..	19 377.6	32	49	68	86	(NA)
	1972..	7 468.8	37	52	70	87	(NA)
	1967..	5 539.4	39	54	71	87	(NA)
	1963..	4 200.6	42	55	74	89	(NA)
	1958..	2 787.3	47	61	80	91	(NA)
28693	Synthetic organic chemicals, n.e.c. ----- 1982..	1 873.1	34	50	73	94	452
	1977..	1 600.5	31	46	75	96	(NA)
	1972..	712.6	38	54	78	96	(NA)
	1967..	585.6	38	54	81	97	(NA)
	1963..	418.9	34	51	78	96	(NA)
	1958..	291.4	34	53	77	96	(NA)
28694	Pesticides and other synthetic organic chemicals ----- 1982..	1 785.8	54	76	93	100	951
	1977..	1 474.0	65	80	93	99+	(NA)
	1972..	495.1	57	79	97	100	(NA)
	1967..	308.2	57	75	93	99+	(NA)
	1963..	223.4	54	77	95	99+	(NA)
	1958..	96.2	52	74	96	(D)	(NA)
	1954..	96.9	43	70	94	(NA)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2869- 28695	Industrial organic chemicals, n.e.c. <sup>6</sup> —Con. Ethyl alcohol and other industrial organic chemicals, n.e.c. <sup>110</sup> -----	1982... 1 137.4 1977... 645.9 1972... 273.4 1967... 239.4 1963... 192.3 1958... 121.4	26 27 28 30 32 42	42 45 43 46 48 62	67 71 69 73 69 80	91 92 92 93 90 94	313 (NA) (NA) (NA) (NA) (NA) (NA)
28696	Miscellaneous end-use chemicals and chemical products <sup>11</sup> -----	1982... 3 135.0 1977... 2 070.5	45 41	64 62	82 90	95 99	671 (NA)
28697	Miscellaneous cyclic and acyclic chemicals <sup>11</sup> -----	1982... 18 499.9 1977... 13 424.7	38 39	56 55	79 75	95 93	567 (NA)
28690	Industrial organic chemicals, n.e.c., n.s.k. -----	1982... 283.3 1977... 162.1 1972... 73.0 1967... 38.7 1963... 11.6 1958... 8.4	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
2873-	Nitrogenous fertilizers <sup>111</sup> -----	1982... 3 398.6 1977... 2 811.5 1972... 928.2	33 28 26	50 45 43	78 72 71	96 96 96	432 (NA) (NA)
28731	Synthetic ammonia, nitric acid, and ammonium compounds -----	1982... 2 745.6 1977... 2 300.8 1972... 759.5 1967... 827.3 1963... 587.8	31 27 26 29 38	49 45 43 46 55	81 74 71 68 80	99 98 97 94 99	425 (NA) (NA) (NA) (NA) (NA)
28732	Urea -----	1982... 540.7 1977... 447.6 1972... 158.2	55 48 45	74 70 64	99 97 97	100 100 100	1 007 (NA) (NA)
28733	Fertilizer materials of organic origin -----	1982... 30.0 1977... 29.5 1972... (S)	49 41 (S)	80 70 (S)	99+ 98 (S)	100 100 (S)	924 (NA) (NA)
28730	Nitrogenous fertilizers, n.s.k. -----	1982... 82.3 1977... 33.6 1972... (D)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
2874-	Phosphatic fertilizers <sup>112</sup> -----	1982... 3 742.0 1977... 2 552.6 1972... 1 051.4	36 33 26	61 54 45	91 89 80	99 99+ 99	574 (NA) (NA)
28741	Phosphoric acid <sup>113</sup> -----	1982... 1 028.9 1977... 510.2 1972... 177.5	71 49 53	87 72 80	99+ 99+ 99+	100 100 100	1 547 (NA) (NA)
28742	Superphosphate, other phosphatic fertilizer materials -----	1982... 1 997.6 1977... 1 609.1 1972... 419.7 1967... 542.0 1963... 321.5 1958... 153.6 1954... 131.3	53 45 38 39 44 47 50	75 67 61 60 64 68 70	99 97 93 91 90 92 88	100 100 99+ 99+ 99 99 (NA)	932 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28744	Mixed fertilizers produced from one or more materials made in same plant (also see code 28750) -----	1982... 708.6 1977... 429.3 1972... 443.0 1967... 114435.9	49 53 42 35	67 80 62 61	90 98 91 85	100 (NA) 100 99	779 (NA) (NA) (NA)
28740	Phosphatic fertilizers, n.s.k. -----	1982... 6.8 1977... 3.9 1972... 11.3	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(D) (NA) (NA)
28750	Mixed fertilizers made by plants which do not manufacture fertilizer materials (1977 product class 28754) (also see code 28744) -----	1982... 1 528.8 1977... 1 480.9 1972... 652.6 1967... 588.2	18 21 24 21	28 36 37 37	49 58 57 54	69 75 73 71	165 (NA) (NA) (NA) (NA)
2879-	Agricultural chemicals, n.e.c. -----	1982... 4 794.0 1977... 2 704.0 1972... 1 195.9 1967... 115834.3 1963... 115488.7 1958... 115347.6	39 37 34 39 27 30	58 57 51 56 47 48	81 76 73 77 67 (NA)	91 87 85 88 85 (NA)	555 (NA) (NA) (NA) (NA) (NA) (NA)
28795	Insecticidal preparations for agricultural, garden, and health service use (1972 product class 28791) -----	1982... 966.2 1977... 828.2 1972... 361.0	46 45 48	71 67 67	90 87 87	99 98 98	753 (NA) (NA)
28796	Herbicidal preparations for agricultural, garden, and health service use (1972 product class 28792) -----	1982... 2 641.7 1977... 1 177.1 1972... 432.0	62 65 77	77 84 89	95 96 98	99+ 99+ 99+	1 176 (NA) (NA)
28797	Fungicidal preparations for agricultural, garden, and health service use <sup>11</sup> -----	1982... 348.6 1977... 196.9	69 70	84 85	98 97	100 99+	1 452 (NA)
28798	Other pesticidal preparations primarily for agricultural, garden, and health service use <sup>11</sup> -----	1982... 192.8 1977... 119.9	49 47	65 66	87 91	99+ 99+	983 (NA)

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
28	CHEMICALS AND ALLIED PRODUCTS—Con.							
2879- 28799	Agricultural chemicals, n.e.c.—Con. Household pesticidal preparations, including industrial exterminants (1972 product class 28794) -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	468.2 227.8 183.8 129.9 110.8 85.9 60.6	53 56 52 45 36 28 31	70 71 70 60 55 41 42	89 89 85 80 72 61 62	99 99 97 94 87 81 (NA)	1 164 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28790	Agricultural chemicals, n.s.k.-----	1982... 1977... 1972...	176.4 154.1 133.5	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
2891-	Adhesives and sealants <sup>116</sup> -----	1982... 1977... 1972...	2 903.0 1 873.1 956.9	22 22 16	31 33 27	45 48 45	65 67 68	177 (NA) (NA)
28913	Natural base glues and adhesives <sup>117</sup> -----	1982... 1977... 1972...	177.5 166.4 118.6	40 43 38	63 60 55	88 83 81	99+ 98 99	621 (NA) (NA)
28914	Synthetic resin and rubber adhesives <sup>118</sup> -----	1982... 1977... 1972...	1 833.8 1 221.8 675.1	31 27 20	41 38 32	57 57 50	76 77 76	302 (NA) (NA)
28915	Caulking compounds and sealants <sup>119</sup> -----	1982... 1977... 1972...	602.8 364.4 122.9	30 36 51	46 53 69	68 74 88	91 93 99	431 (NA) (NA)
28910	Adhesives and sealants, n.s.k.-----	1982... 1977... 1972...	288.9 120.5 40.3	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
28920	Explosives (1977 product class 28921) -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	587.6 426.1 240.1 248.5 181.0 169.7 183.7	54 64 69 69 70 73 79	73 82 84 86 87 90 89	92 96 98 98 99 98 99	99+ 100 100 100 100 100 (NA)	916 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
2893-	Printing ink -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	1 518.7 904.0 498.0 342.6 258.2 211.5 172.4	41 42 37 46 45 53 51	53 56 52 60 58 64 61	72 72 72 75 74 76 74	87 87 87 88 87 89 (NA)	556 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28931	Letterpress inks (black and color) -----	1982... 1977... 1972...	128.0 105.9 109.7	69 57 42	86 74 71	97 91 88	99+ 99+ 98	1 374 (NA) (NA)
28932	Lithographic and offset inks (black and color) -----	1982... 1977... 1972...	536.4 303.2 151.7	47 45 39	60 60 55	81 81 80	96 97 96	772 (NA) (NA)
28933	Gravure inks -----	1982... 1977... 1972...	325.8 190.7 82.1	70 71 60	87 88 86	99 99+ 99	100 100 100	1 575 (NA) (NA)
28934	Flexographic inks -----	1982... 1977... 1972...	241.7 157.1 73.4	47 50 63	65 71 79	89 92 96	100 100 100	743 (NA) (NA)
28935	Printing inks, n.e.c. -----	1982... 1977... 1972...	143.8 60.6 35.3	39 51 47	62 74 68	90 94 93	100 100 100	614 (NA) (NA)
28930	Printing ink, n.s.k. -----	1982... 1977... 1972...	143.1 86.5 45.9	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
28950	Carbon black (channel and furnace process only) -----	1982... 1977... 1972... 1967... 1963... 1958...	652.7 466.2 227.1 167.8 149.4 118.9	70 70 74 72 72 75	100 (X) 99 (D) (D) 100	(X) (X) 100 100 100 (X)	(X) (X) (X) (X) (X) (X)	1 653 (NA) (NA) (NA) (NA) (NA) (NA)
2899-	Chemical preparations, n.e.c. <sup>120</sup> -----	1982... 1977... 1972... 1967... 1963... 1958...	6 101.0 4 243.8 2 199.5 1 431.7 998.6 738.1	18 14 12 15 14 19	25 23 21 22 22 26	39 37 35 36 35 (NA)	57 55 53 55 54 (NA)	123 (NA) (NA) (NA) (NA) (NA) (NA)
28991	Salt -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	419.8 246.2 129.8 111.6 98.4 86.5 71.6	79 74 70 75 77 81 83	97 95 89 90 89 91 93	100 100 100 (D) 99 99 99	(X) (X) (X) (X) 100 100 (NA)	2 707 (NA) (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
28	CHEMICALS AND ALLIED PRODUCTS—Con.						
2899- 28992	Chemical preparations, n.e.c. <sup>120</sup> —Con. Fatty acids (produced for sale as such)-----	1982-- 350.8 1977-- 353.2 1972-- 155.3 1967-- 111.2 1963-- 88.1 1958-- 67.6 1954-- 52.3	53 56 50 45 49 46 (D)	76 79 73 68 70 68 69	99 99+ 98 97 98 99 98	100 100 100 100 100 100 (NA)	982 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28994	Gelatin, except ready-to-eat desserts-----	1982-- 242.3 1977-- 175.3 1972-- 68.2 1967-- 66.2 1963-- 55.4 1958-- 52.0 1954-- 43.9	66 58 76 71 62 66 69	91 83 95 91 84 86 87	100 100 100 100 99+ 99 (D)	(X) (X) (X) (X) 100 (NA) 100 (NA)	1 338 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
28995	Essential oils, fireworks, and chemical preparations, n.e.c. <sup>120</sup> -----	1982-- 4 437.4 1977-- 3 109.0 1972-- 1 612.4 1967-- 1 084.3 1963-- 770.9 1958-- 557.2	22 19 16 18 16 20	33 28 26 25 24 28	47 44 42 42 38 (NA)	66 62 62 62 56 (NA)	191 (NA) (NA) (NA) (NA) (NA) (NA)
28990	Chemical preparations, n.e.c., n.s.k.-----	1982-- 650.7 1977-- 360.1 1972-- 233.8 1967-- 124.5 1963-- 41.2 1958-- 26.8	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
29	PETROLEUM AND COAL PRODUCTS						
2911- 29111	Petroleum refining-----	1982-- 191 374.7 1977-- 88 589.5 1972-- 24 772.8 1967-- 19 248.5 1963-- 15 557.7 1958-- 13 889.4	28 30 31 32 32 31	48 53 56 57 55 54	76 81 84 84 81 81	93 94 96 96 95 93	379 (NA) (NA) (NA) (NA) (NA) (NA)
29111	Gasoline, including finished base stocks and blending agents-----	1982-- 95 114.7 1977-- 41 840.4 1972-- 13 029.6 1967-- 9 844.2	27 30 31 33	48 53 55 58	79 84 86 87	97 98 98 98	391 (NA) (NA) (NA)
29112	Jet fuel-----	1982-- 14 862.4 1977-- 5 358.9 1972-- 1 371.6 1967-- 1 100.4	43 54 52 45	59 69 74 63	84 89 92 86	97 99 99 98	628 (NA) (NA) (NA)
29113	Kerosene-----	1982-- 1 886.6 1977-- 892.9 1972-- 372.4 1967-- 430.5	57 37 43 34	77 59 64 54	94 94 93 89	100 99+ 99+ 99+	1 045 (NA) (NA) (NA)
29114	Light fuel oils-----	1982-- 37 302.6 1977-- 17 509.4 1972-- 4 407.7 1967-- 3 305.7 1963-- 2 896.3 1958-- 2 490.9 1954-- 2 064.3	27 35 33 34 36 35 36	47 56 58 58 59 59 59	73 83 87 85 83 83 85	93 97 98 98 96 96 (NA)	361 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
29115	Heavy fuel oil-----	1982-- 11 390.6 1977-- 6 793.9 1972-- 1 107.2 1967-- 566.1 1963-- 621.8 1958-- 817.2 1954-- 787.8	35 41 41 38 35 32 34	52 58 60 61 55 56 57	75 79 83 83 82 83 84	94 94 96 96 96 94 (NA)	485 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
29117	Lubricating oils and greases made in refineries (also see code 29920)-----	1982-- <sup>52</sup> 891.4 1977-- <sup>51</sup> 718.9 1972-- <sup>58</sup> 894.8 1967-- <sup>58</sup> 883.6	52 45 39 43	74 69 64 65	98 98 98 96	100 100 100 99+	1 028 (NA) (NA) (NA)
29118	Unfinished oils and lubricating oil base stock-----	1982-- 8 065.9 1977-- 2 887.8 1972-- 733.7 1967-- 613.2 1963-- 526.2 1958-- 440.9 1954-- 294.9	56 52 55 56 51 46 39	72 69 79 76 78 74 69	92 93 98 96 94 94 93	99+ 99+ 100 99+ 99+ 99 (NA)	1 197 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
29119	Asphalt-----	1982-- 2 980.3 1977-- 2 216.7 1972-- 671.5 1967-- 424.2 1963-- 360.5 1958-- 284.6 1954-- 221.7	43 54 43 41 43 39 45	58 67 62 58 58 56 63	80 85 84 82 81 77 83	98 98 98 98 98 96 (NA)	683 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
2911A	Liquefied refinery gases, including other aliphatics, made in a refinery <sup>121</sup> -----	1982-- 4 454.7	43	64	88	99	672

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
<b>29</b>	<b>PETROLEUM AND COAL PRODUCTS—Con.</b>						
<b>2911-</b>	<b>Petroleum refining—Con.</b>						
2911B	Liquefied refinery gases, including other aliphatics, not made in a refinery <sup>121</sup> ----- 1982--	3 941.4	56	81	98	100	1 364
2911C	Aromatics made from purchased refinery products <sup>122</sup> ----- 1982--	1 353.7	79	99	100	(X)	2 115
2911D	Other finished petroleum products (including waxes) <sup>122</sup> ----- 1982--	5 609.3	31	53	83	99	466
29110	Petroleum refining products, n.s.k. <sup>122</sup> ----- 1982--	1 521.2	(X)	(X)	(X)	(X)	(X)
<b>29510</b>	<b>Paving mixtures and blocks</b> -----	1982-- 2 881.0	18	25	37	54	149
	1977-- 1 518.6	17	23	34	50	(NA)	
	1972-- 893.4	14	21	34	50	(NA)	
	1967-- 529.6	14	21	34	50	(NA)	
	1963-- 402.9	14	20	32	46	(NA)	
	1958-- 265.9	10	16	29	47	(NA)	
	1954-- 120.7	14	23	37	(NA)	(NA)	
<b>2952-</b>	<b>Asphalt felts and coatings</b> -----	1982-- 2 633.2	46	68	86	95	788
	1977-- 1 828.6	45	70	86	96	(NA)	
	1972-- 901.2	48	73	86	96	(NA)	
	1967-- 519.4	37	63	82	95	(NA)	
	1963-- 459.5	35	62	81	93	(NA)	
	1958-- 408.1	35	60	82	95	(NA)	
	1954-- 388.2	39	65	85	(NA)	(NA)	
29521	Asphalt and tar saturated felts and boards for nonbuilding use ----- 1982--	64.4	61	82	100	(X)	1 439
	1977-- 99.5	66	90	100	(X)	(NA)	
	1972-- 33.2	68	86	100	(X)	(NA)	
	1967-- 27.5	60	83	(D)	100	(NA)	
	1963-- 21.1	48	75	95	100	(NA)	
	1958-- 21.5	49	66	93	100	(NA)	
29522	Roofing asphalts and pitches, coatings, and cements ----- 1982--	466.8	50	65	82	98	950
	1977-- 263.4	52	66	88	99+	(NA)	
	1972-- 155.3	51	67	85	98	(NA)	
	1967-- 101.4	45	60	82	98	(NA)	
	1963-- 94.4	45	58	81	97	(NA)	
	1958-- 67.9	42	55	78	96	(NA)	
	1954-- 41.9	34	51	75	(NA)	(NA)	
29523	Prepared asphalt and tar roofing and siding products ----- 1982--	2 030.8	53	80	97	100	1 002
	1977-- 1 405.3	55	81	97	100	(NA)	
	1972-- 690.6	57	83	97	100	(NA)	
	1967-- 375.2	49	78	95	100	(NA)	
	1963-- 338.6	45	74	92	99+	(NA)	
	1958-- 313.6	43	71	91	99	(NA)	
29520	Asphalt felts and coatings, n.s.k. ----- 1982--	71.2	(X)	(X)	(X)	(X)	(X)
	1977-- 60.5	(X)	(X)	(X)	(X)	(NA)	
	1972-- 22.1	(X)	(X)	(X)	(X)	(NA)	
	1967-- 15.3	(X)	(X)	(X)	(X)	(NA)	
	1963-- 5.4	(X)	(X)	(X)	(X)	(NA)	
	1958-- 5.1	(X)	(X)	(X)	(X)	(NA)	
<b>29920</b>	<b>Lubricating oils and greases not made in a refinery (also see code 29117)</b> ----- 1982--	<sup>52</sup> 718.3	28	37	53	72	265
	1977-- <sup>51</sup> 514.4	26	38	54	73	(NA)	
	1972-- <sup>56</sup> 420.0	30	42	57	73	(NA)	
	1967-- <sup>54</sup> 443.4	37	49	67	83	(NA)	
	1963-- <sup>54</sup> 255.6	36	46	63	78	(NA)	
	1958-- <sup>52</sup> 444.5	27	39	59	77	(NA)	
<b>29990</b>	<b>Petroleum and coal products, n.e.c.</b> ----- 1982--	700.3	55	75	89	98	1 070
	1977-- 494.6	60	77	91	99+	(NA)	
	1972-- 140.8	67	83	93	100	(NA)	
	1967-- 79.6	76	85	96	100	(NA)	
	1963-- 69.3	65	78	93	99+	(NA)	
	1958-- 67.0	(X)	(X)	(X)	(X)	(NA)	
<b>30</b>	<b>RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS</b>						
<b>3011-</b>	<b>Tires and inner tubes</b> ----- 1982--	9 047.3	67	87	97	99+	1 632
	1977-- 8 127.6	71	89	97	99+	(NA)	
	1972-- 4 891.4	73	89	97	99+	(NA)	
	1967-- 3 133.5	71	88	97	99	(NA)	
	1963-- 2 419.8	72	88	97	99	(NA)	
	1958-- 2 145.3	71	86	97	99	(NA)	
30111	Passenger car pneumatic tires (casings) ----- 1982--	5 068.4	73	(D)	(X)	(X)	1 827
	1977-- 4 571.1	76	94	100	(X)	(NA)	
	1972-- 2 860.0	77	93	100	(X)	(NA)	
	1967-- 1 713.6	75	93	100	(X)	(NA)	
	1963-- 1 285.9	75	93	100	(X)	(NA)	
	1958-- 1 076.8	74	90	100	(X)	(NA)	
30112	Truck and bus pneumatic tires ----- 1982--	2 592.7	75	94	100	(X)	2 109
	1977-- 2 276.6	81	96	100	(X)	(NA)	
	1972-- 1 282.1	80	95	100	(X)	(NA)	
	1967-- 829.4	75	93	100	(X)	(NA)	
	1963-- 659.5	75	93	100	(X)	(NA)	
	1958-- 602.0	72	90	100	(X)	(NA)	
30117	Tractor and implement pneumatic tires <sup>123</sup> ----- 1982--	243.1	98	100	(X)	(X)	(D)
30118	Industrial and utility pneumatic tires <sup>123</sup> ----- 1982--	186.3	95	99+	100	(X)	(D)

See footnotes at end of table.

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
30	<b>RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS—Con.</b>						
3011- 30119	<b>Tires and inner tubes—Con.</b>						
	Other pneumatic tires <sup>123</sup> ----- 1982--	123.3	83	99+	100	(X)	2 607
3011A	Solid and semipneumatic tires <sup>123</sup> ----- 1982--	127.7	52	80	99	100	948
3011B	Truck and bus inner tubes <sup>124</sup> ----- 1982--	90.5	73	100	(X)	(X)	1 646
3011C	All other inner tubes <sup>124</sup> ----- 1982--	94.6	65	90	100	(X)	1 313
3011D	Tread rubber, tire sundries, and repair materials (1977 product class 30115)----- 1982--	501.4	62	75	95	100	1 695
	1977--	368.7	46	63	91	100	(NA)
	1972--	217.1	47	62	86	99+	(NA)
	1967--	198.3	43	62	86	99+	(NA)
	1963--	192.5	47	63	83	97	(NA)
	1958--	180.9	47	62	82	98	(NA)
	1954--	108.0	46	62	81	(NA)	(NA)
30110	Tires and inner tubes, n.s.k. ----- 1982--	19.3	(X)	(X)	(X)	(X)	(X)
	1977--	20.2	(X)	(X)	(X)	(X)	(NA)
	1972--	4.2	(X)	(X)	(X)	(X)	(NA)
	1967--	4.9	(X)	(X)	(X)	(X)	(NA)
3021-	<b>Rubber and plastics footwear<sup>125</sup></b> ----- 1982--	662.6	39	59	89	99+	576
	1977--	404.8	53	70	95	99+	(NA)
	1972--	496.5	56	68	85	99	(NA)
30214	Protective footwear <sup>126</sup> ----- 1982--	121.8	68	95	100	(X)	1 528
30215	Shoes with soles vulcanized, molded, or cemented to fabric upper <sup>126</sup> ----- 1982--	536.1	45	70	96	100	744
30210	Rubber and plastics footwear, n.s.k. <sup>126</sup> ----- 1982--	4.7	(X)	(X)	(X)	(D)	(X)
30310	<b>Reclaimed rubber</b> ----- 1982--	59.8	72	88	99+	100	1 677
	1977--	61.5	74	92	99+	100	(NA)
	1972--	47.7	74	92	99	100	(NA)
	1967--	47.3	73	97	99	100	(NA)
	1963--	55.2	73	97	99+	100	(NA)
	1958--	47.6	66	90	(D)	100	(NA)
	1954--	44.5	66	90	99	(NA)	(NA)
3041-	<b>Rubber and plastics hose and belting<sup>127</sup></b> ----- 1982--	1 685.0	55	67	82	95	964
	1977--	1 541.2	51	68	83	95	(NA)
	1972--	899.5	48	68	86	97	(NA)
30411	Rubber and plastics belts and belting, flat <sup>127</sup> ----- 1982--	291.2	60	79	97	100	1 372
	1977--	260.9	63	77	97	100	(NA)
	1972--	159.6	54	73	93	100	(NA)
30412	Rubber and plastics transmission belts and belting, other than flat <sup>127</sup> ----- 1982--	391.7	91	99	100	(X)	(D)
	1977--	348.2	93	99	100	(X)	(NA)
	1972--	204.0	86	96	100	(X)	(NA)
30413	Rubber hose, mandrel made and all hydraulic <sup>127</sup> ----- 1982--	310.3	52	73	97	100	931
	1977--	253.4	53	84	99+	100	(NA)
	1972--	143.5	62	87	99	100	(NA)
30414	Rubber hose, long length nonhydraulic <sup>127</sup> ----- 1982--	169.4	65	89	100	(X)	1 303
	1977--	164.9	53	83	100	(X)	(NA)
	1972--	84.8	77	(D)	100	(X)	(NA)
30415	Rubber and plastics garden hose <sup>127</sup> ----- 1982--	110.7	78	99	100	(X)	1 834
	1977--	113.3	67	94	100	(X)	(NA)
	1972--	56.3	67	94	100	(X)	(NA)
30416	All other rubber and plastics hose, n.e.c. <sup>127</sup> ----- 1982--	410.4	47	66	88	99+	877
	1977--	387.4	44	61	83	99	(NA)
	1972--	237.1	45	66	88	99+	(NA)
30410	Rubber and plastics hose and belting, n.s.k. <sup>127</sup> ----- 1982--	15.9	(X)	(X)	(X)	(X)	(X)
	1977--	13.1	(X)	(X)	(X)	(X)	(NA)
	1972--	14.2	(X)	(X)	(X)	(X)	(NA)
3069-	<b>Fabricated rubber products, n.e.c.<sup>128</sup></b> ----- 1982--	5 854.8	11	18	31	49	69
	1977--	4 223.2	15	23	36	52	(NA)
	1972--	2 538.1	15	23	37	54	(NA)
30693	Sponge, expanded and foam rubber products ----- 1982--	449.8	39	55	75	96	582
	1977--	584.3	47	65	83	97	(NA)
	1972--	350.9	53	72	88	98	(NA)
	1967--	276.7	53	75	92	99	(NA)
	1963--	226.4	53	71	88	96	(NA)
	1958--	200.8	47	69	89	97	(NA)
30694	Rubber floor and wall coverings ----- 1982--	236.4	50	73	95	100	1 049
	1977--	170.6	45	63	93	100	(NA)
	1972--	98.3	47	68	96	100	(NA)
	1967--	70.7	40	62	94	100	(NA)
	1963--	93.2	35	56	85	100	(NA)
	1958--	99.4	34	55	82	99	(NA)
30696	Shoe products, rubber, elastomer resin ----- 1982--	265.0	51	68	90	100	949
	1977--	225.1	40	60	88	100	(NA)
	1972--	154.7	57	75	97	100	(NA)
	1967--	126.1	55	73	98	100	(NA)
	1963--	136.2	45	64	93	100	(NA)
	1958--	134.9	43	65	88	99	(NA)
	1954--	113.1	45	65	89	(NA)	(NA)

See footnotes at end of table.



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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
30	RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS—Con.						
3069-	Fabricated rubber products, n.e.c. <sup>128</sup> —Con.						
30697	Rubber druggist and medical sundries ----- 1982..	454.2	44	68	94	100	798
	1977..	232.0	50	74	97	100	(NA)
	1972..	116.9	44	70	96	100	(NA)
	1967..	84.1	46	70	96	100	(NA)
	1963..	79.2	43	66	93	100	(NA)
	1958..	57.0	43	71	95	99	(NA)
	1954..	46.8	41	66	90	(NA)	(NA)
30699	Rubber compounds or mixtures <sup>11</sup> ----- 1982..	594.1	63	74	89	99	1 645
	1977..	246.1	61	78	94	(D)	(NA)
3069A	Molded rubber mechanical goods <sup>11</sup> ----- 1982..	1 571.2	18	29	47	68	155
	1977..	1 305.9	24	36	51	72	(NA)
3069B	Extruded and lathe cut mechanical rubber goods <sup>11</sup> ----- 1982..	455.0	27	43	68	91	350
	1977..	259.8	25	43	71	94	(NA)
3069C	Industrial rubber products, n.e.c. ----- 1982..	582.2	38	53	71	88	505
	1977..	262.0	32	46	70	90	(NA)
3069D	Rubber coated fabrics and rubber clothing <sup>11</sup> ----- 1982..	362.0	31	49	77	98	447
	1977..	178.6	33	53	78	99	(NA)
3069E	Other rubber goods <sup>11</sup> ----- 1982..	581.6	23	36	61	87	264
	1977..	455.9	32	46	69	91	(NA)
30690	Fabricated rubber products, n.e.c., n.s.k. ----- 1982..	303.2	(X)	(X)	(X)	(X)	(X)
	1977..	302.9	(X)	(X)	(X)	(X)	(NA)
	1972..	140.4	(X)	(X)	(X)	(X)	(NA)
	1967..	102.1	(X)	(X)	(X)	(X)	(NA)
	1963..	42.4	(X)	(X)	(X)	(X)	(NA)
	1958..	21.6	(X)	(X)	(X)	(X)	(NA)
3079-	Miscellaneous plastics products <sup>129</sup> ----- 1982..	37 557.9	7	11	18	28	24
	1977..	23 878.7	7	11	19	31	(NA)
	1972..	11 077.7	8	13	23	35	(NA)
30792	Plastics film and sheet, unsupported <sup>130</sup> ----- 1982..	6 026.8	27	35	49	66	271
30794	Plastics piping <sup>130</sup> ----- 1982..	1 406.7	18	32	53	77	192
30795	Plastics bottles <sup>130</sup> ----- 1982..	1 921.4	50	66	81	93	779
30797	Plastics foam products <sup>130</sup> ----- 1982..	4 357.9	17	27	47	67	148
3079J	Molded plastics products, n.e.c. <sup>130</sup> ----- 1982..	11 339.6	9	13	21	31	35
3079K	Miscellaneous plastics products <sup>130</sup> ----- 1982..	7 949.9	9	15	25	40	45
30790	Miscellaneous plastics products, n.s.k. ----- 1982..	4 555.7	(X)	(X)	(X)	(X)	(X)
	1977..	2 957.5	(X)	(X)	(X)	(X)	(NA)
31	LEATHER AND LEATHER PRODUCTS						
3111-	Leather tanning and finishing ----- 1982..	1 706.2	18	31	56	80	206
	1977..	1 380.1	17	28	52	76	(NA)
	1972..	1 025.3	17	29	48	71	(NA)
	1967..	846.2	20	31	49	70	(NA)
	<sup>37</sup> 1963..	734.9	19	30	47	69	(NA)
	<sup>38</sup> 1963..	<sup>38</sup> 635.8	20	32	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	1958..	<sup>38</sup> 634.2	20	32	( <sup>35</sup> )	( <sup>35</sup> )	(NA)
	1954..	618.2	20	30	48	(NA)	(NA)
31116	Finished and unfinished leather <sup>131</sup> ----- 1982..	1 400.2	20	33	61	89	241
31119	Commission tanning or finishing leather ----- 1982..	231.9	35	47	68	91	446
	1977..	109.4	37	55	77	95	(NA)
	1972..	87.0	28	40	61	86	(NA)
	1967..	113.1	28	42	62	85	(NA)
	1963..	99.1	24	35	54	77	(NA)
31110	Tanned and finished leather, n.s.k. ----- 1982..	74.2	(X)	(X)	(X)	(X)	(X)
	1977..	68.0	(X)	(X)	(X)	(X)	(NA)
	1972..	64.8	(X)	(X)	(X)	(X)	(NA)
	1967..	35.1	(X)	(X)	(X)	(X)	(NA)
	1963..	23.9	(X)	(X)	(X)	(X)	(NA)
	1958..	7.6	(X)	(X)	(X)	(X)	(NA)
31310	Footwear cut stock ----- 1982..	346.8	26	41	63	88	326
	1977..	255.1	21	32	52	80	(NA)
	1972..	200.9	19	28	49	73	(NA)
	1967..	254.3	19	26	43	62	(NA)
	1963..	216.0	18	24	36	56	(NA)
	1958..	239.0	18	28	39	56	(NA)
	1954..	242.9	22	32	44	(NA)	(NA)
31420	House slippers ----- 1982..	265.3	62	76	92	99+	1 341
	1977..	190.2	44	62	84	98	(NA)
	1972..	159.4	37	53	75	93	(NA)
	1967..	162.3	22	33	58	85	(NA)
	1963..	127.6	18	29	49	76	(NA)
	<sup>39</sup> 1958..	115.7	16	26	49	73	(NA)
	<sup>39</sup> 1954..	92.2	17	29	48	(NA)	(NA)
3143-	Men's footwear, except athletic ----- 1982..	1 971.2	27	42	71	93	363
	1977..	1 592.1	32	45	72	94	(NA)

See footnotes at end of table.

Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
31	LEATHER AND LEATHER PRODUCTS—Con.						
3143-	Men's footwear, except athletic—Con.						
	1972--	1 181.4	36	50	74	93	(NA)
31433	Men's work shoes and boots (1967 product class 31412) -----	1982-- 565.5	39	62	93	100	622
	1977-- 421.7	37	62	90	100	(NA)	(NA)
	1972-- 309.4	38	62	89	100	(NA)	(NA)
	1967-- 315.0	33	53	84	99	(NA)	(NA)
	1963-- 174.9	39	64	89	99	(NA)	(NA)
	<sup>39</sup> 1958-- 146.9	42	64	87	99	(NA)	(NA)
	<sup>39</sup> 1954-- 110.0	49	68	86	(NA)	(NA)	(NA)
31434	Men's dress and casual boots, except work <sup>11</sup> -----	1982-- 446.1	48	64	89	99+	760
	1977-- 271.0	43	62	87	100	(NA)	(NA)
	1972-- 154.1	49	67	94	100	(NA)	(NA)
31435	Men's dress and casual shoes, except athletic <sup>11</sup> -----	1982-- 940.0	42	60	82	99	650
	1977-- 872.5	43	60	86	99	(NA)	(NA)
31430	Men's footwear, except athletic, n.s.k. -----	1982-- 19.6	(X)	(X)	(X)	(X)	(X)
	1977-- 26.9	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 3.8	(X)	(X)	(X)	(X)	(NA)	(NA)
3144-	Women's footwear, except athletic -----	1982-- 1 994.1	36	46	62	82	463
	1977-- 1 386.8	30	39	55	77	(NA)	(NA)
	1972-- 1 305.6	34	42	56	75	(NA)	(NA)
31445	Women's boots -----	1982-- 219.2	45	69	91	99+	726
	1977-- 232.2	34	53	82	99	(NA)	(NA)
	1972-- 102.6	45	60	85	100	(NA)	(NA)
31446	Women's sandals <sup>11</sup> -----	1982-- 225.9	45	62	84	99+	712
	1977-- 102.8	40	58	86	100	(NA)	(NA)
31447	Women's shoes, casual, except sandals <sup>11</sup> -----	1982-- 860.8	34	48	72	93	427
	1977-- 524.6	35	47	72	94	(NA)	(NA)
31448	Women's dress shoes <sup>11</sup> -----	1982-- 649.0	55	66	84	99	1 102
	1977-- 480.6	42	56	76	98	(NA)	(NA)
31440	Women's footwear, except athletic, n.s.k. <sup>11</sup> -----	1982-- 39.2	(X)	(X)	(X)	(X)	(X)
	1977-- 46.7	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 48.5	(X)	(X)	(X)	(X)	(NA)	(NA)
3149-	Footwear, except rubber, n.e.c. -----	1982-- 721.7	20	33	56	84	232
	1977-- 568.0	22	36	61	86	(NA)	(NA)
	1972-- 478.7	26	39	61	82	(NA)	(NA)
31491	Youths' and boys' shoes (1967 product class 31413) -----	1982-- 89.2	42	66	95	100	715
	1977-- 98.3	38	62	89	100	(NA)	(NA)
	1972-- 103.7	33	53	79	99	(NA)	(NA)
	1967-- 100.1	37	53	77	99	(NA)	(NA)
	1963-- 82.2	39	54	77	96	(NA)	(NA)
	<sup>39</sup> 1958-- 81.8	44	58	77	94	(NA)	(NA)
31493	Infants' and babies' shoes (1967 product class 31416) -----	1982-- 121.1	41	60	85	100	692
	1977-- 80.9	37	55	83	(D)	(NA)	(NA)
	1972-- 78.9	45	61	81	98	(NA)	(NA)
	1967-- 69.6	38	52	74	95	(NA)	(NA)
	1963-- 73.1	36	50	71	91	(NA)	(NA)
	<sup>39</sup> 1958-- 76.2	32	45	62	84	(NA)	(NA)
	<sup>39</sup> 1954-- 71.0	38	50	65	(NA)	(NA)	(NA)
31495	Misses' shoes, except athletic <sup>11</sup> -----	1982-- 77.3	42	64	93	100	674
	1977-- 90.9	30	51	84	100	(NA)	(NA)
31496	Children's shoes, except athletic <sup>11</sup> -----	1982-- 137.3	40	62	84	100	602
	1977-- 114.0	36	54	81	99	(NA)	(NA)
31497	All other footwear, except rubber and slippers (1972 product class 31494) -----	1982-- 257.2	32	53	86	99+	491
	1977-- 151.3	45	62	87	99	(NA)	(NA)
	1972-- 86.3	40	58	86	100	(NA)	(NA)
	1967-- 40.4	35	50	77	100	(NA)	(NA)
	1963-- 54.4	30	47	72	94	(NA)	(NA)
	<sup>39</sup> 1958-- 47.2	30	42	67	89	(NA)	(NA)
31490	Footwear, except rubber, n.e.c., n.s.k. -----	1982-- 39.7	(X)	(X)	(X)	(X)	(X)
	1977-- 32.6	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 3.3	(X)	(X)	(X)	(X)	(NA)	(NA)
31510	Dress and work gloves and mittens, all leather -----	1982-- 138.7	39	53	75	94	592
	1977-- 121.9	33	44	66	92	(NA)	(NA)
	1972-- 80.0	34	47	69	92	(NA)	(NA)
	1967-- 73.3	25	38	58	84	(NA)	(NA)
	1963-- 61.9	20	30	52	80	(NA)	(NA)
	<sup>39</sup> 1958-- 49.3	21	30	50	77	(NA)	(NA)
31610	Suitcases, briefcases, bags, and musical instrument cases -----	1982-- 647.3	35	45	62	78	564
	1977-- 585.3	41	51	66	82	(NA)	(NA)
	1972-- 321.9	38	47	62	79	(NA)	(NA)
	1967-- 320.1	34	44	59	76	(NA)	(NA)
	1963-- 204.8	30	38	53	70	(NA)	(NA)
	1958-- 180.5	26	34	47	64	(NA)	(NA)
31710	Women's and children's handbags and purses -----	1982-- 524.9	16	26	45	69	149
	1977-- 436.2	15	25	43	67	(NA)	(NA)
	1972-- 344.4	14	22	37	59	(NA)	(NA)
	1967-- 312.1	10	17	31	51	(NA)	(NA)
	1963-- 266.1	10	16	30	50	(NA)	(NA)
	1958-- 214.1	9	15	27	48	(NA)	(NA)
	1954-- 180.3	7	13	25	(NA)	(NA)	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
31	LEATHER AND LEATHER PRODUCTS—Con.							
31720	Personal leather goods, except handbags and purses -----	1982..	393.1	28	41	57	77	294
		1977..	369.2	40	50	65	82	(NA)
		1972..	235.9	36	45	63	81	(NA)
		1967..	178.9	33	44	58	75	(NA)
		1963..	154.3	30	42	56	73	(NA)
		1958..	134.7	22	34	51	69	(NA)
31990	Saddlery, harnesses and whips, and other leather products, n.e.c. -----	1982..	305.1	16	26	45	65	141
		1977..	237.4	13	24	43	63	(NA)
		1972..	146.0	15	23	39	59	(NA)
		1967..	89.9	16	26	41	63	(NA)
		1963..	67.1	18	26	40	60	(NA)
		1958..	61.2	14	21	35	55	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS							
3211- 32313	Flat glass <sup>132</sup> -----	1982..	1 998.4	78	90	(NA)	(NA)	1 972
		1977..	1 817.6	82	93	(NA)	(NA)	(NA)
		1972..	1 248.3	83	94	(NA)	(NA)	(NA)
		1967..	810.9	85	94	(NA)	(NA)	(NA)
		1963..	733.1	87	95	(NA)	(NA)	(NA)
		1958..	547.0	90	96	(NA)	(NA)	(NA)
32113	Laminated glass, made from produced glass (also see code 32313) -----	1982..	(5)	(5)	(5)	(5)	(5)	(NA)
		1977..	(5)	(5)	(5)	(5)	(5)	(NA)
		1972..	(5)	(5)	(5)	(5)	(5)	(NA)
		1967..	(5)	(5)	(5)	(5)	(5)	(NA)
		1963..	(5)	(5)	(5)	(5)	(5)	(NA)
		1958..	(5)	(5)	(5)	(5)	(5)	(NA)
32114	Other flat glass, n.e.c., made from produced glass (also see codes 32317 and 32318) -----	1982..	424.6	82	97	100	(X)	1 977
		1977..	360.6	89	98	100	(X)	(NA)
		1972..	193.6	91	100	(X)	(X)	(NA)
		1967..	130.2	84	97	100	(X)	(NA)
32115	Flat glass <sup>11</sup> -----	1982..	869.9	(D)	(D)	(X)	(X)	2 412
		1977..	742.8	89	(D)	100	(X)	(NA)
32110	Flat glass, n.s.k. -----	1982..	6.6	(X)	(X)	(X)	(X)	(X)
		1977..	7.0	(X)	(X)	(X)	(X)	(NA)
		1972..	1.3	(X)	(X)	(X)	(X)	(NA)
		1967..	2.6	(X)	(X)	(X)	(X)	(NA)
32210	Glass containers -----	1982..	5 143.8	50	73	98	100	966
		1977..	3 618.0	54	75	98	100	(NA)
		1972..	2 085.2	56	77	98	100	(NA)
		1967..	1 331.0	60	75	94	100	(NA)
		1963..	982.4	56	72	92	100	(NA)
		1958..	841.6	59	74	93	100	(NA)
		1954..	628.9	63	78	92	(NA)	(NA)
3229-	Pressed and blown glass, n.e.c. -----	1982..	2 677.0	60	79	93	98	1 069
		1977..	2 100.7	61	78	91	97	(NA)
		1972..	1 262.8	65	80	92	98	(NA)
		1967..	880.4	70	83	93	98	(NA)
		1963..	615.1	68	81	92	99	(NA)
		1958..	448.0	65	78	89	97	(NA)
		1954..	417.0	66	75	86	(NA)	(NA)
32291	Table, kitchen, art, and novelty glassware, made from produced glass (also see code 32317) -----	1982..	813.0	84	92	98	100	2 008
		1977..	743.0	77	91	99	100	(NA)
		1972..	432.9	74	88	98	100	(NA)
		1967..	266.9	70	86	98	100	(NA)
		1963..	220.3	72	86	97	100	(NA)
		1958..	149.0	62	78	95	100	(NA)
32292	Lighting and electronic glassware, made from produced glass (also see code 32317) -----	1982..	700.0	76	94	99	100	1 770
		1977..	526.8	79	92	98	100	(NA)
		1972..	394.6	83	91	98	100	(NA)
		1967..	328.9	92	96	99	100	(NA)
		1963..	210.3	85	91	98	100	(NA)
32293	Glass fiber -----	1982..	768.2	93	99	100	(X)	(D)
		1977..	514.0	94	99	100	(X)	(NA)
		1972..	253.4	95	99	100	(X)	(NA)
		1967..	138.1	93	98	100	(X)	(NA)
		1963..	91.6	95	99+	100	(X)	(NA)
		1958..	59.7	96	98	100	(X)	(NA)
32294	Other pressed and blown glassware, made from produced glass (also see code 32317) -----	1982..	356.4	71	89	99	100	1 924
		1977..	266.9	75	89	99	100	(NA)
		1972..	166.6	80	90	100	(X)	(NA)
		1967..	137.5	(D)	92	99	100	(NA)
		1963..	92.5	(D)	93	99	100	(NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
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32	STONE, CLAY, AND GLASS PRODUCTS—Con.							
3229- 32290	Pressed and blown glass, n.e.c.—Con. Pressed and blown glass, n.e.c., n.s.k. -----	1982... 1977... 1972... 1967... 1963...	39.4 50.0 15.3 9.0 .4	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)	
3231-	Products of purchased glass <sup>133</sup> -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	2 544.6 1 643.3 973.1 567.4 412.0 279.3 239.8	27 24 22 25 19 21 (D)	34 32 31 32 26 29 (D)	46 44 50 45 39 43 (D)	61 60 63 60 (NA) 62 (D) (NA)	
32313	Laminated glass, made from purchased glass (also see code 32113) -----	1982... 1977... 1972... 1967... 1963... 1958...	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(NA) (NA) (NA) (NA) (NA) (NA)	
32315	Mirrors -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	480.1 409.4 250.1 160.0 123.4 88.0 68.9	20 22 24 21 21 27 23	34 36 41 36 36 40 34	58 60 64 60 60 61 57	84 86 (NA) 86 82 80 83 (NA) (NA)	
32317	Pressed and blown glassware, made from purchsed glass (also see codes 32291 and 32292) -----	1982... 1977...	713.8 298.1	50 46	59 58	74 76	88 93	1 348 (NA)
32318	Other glass products, made from purchased glass <sup>11</sup> -----	1982... 1977...	1 189.2 758.1	38 43	50 54	63 69	78 84	573 (NA)
32310	Products of purchased glass, n.s.k. -----	1982... 1977... 1972... 1967... 1963... 1958...	161.5 177.6 95.4 55.3 13.4 34.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)	
32410	Cement, hydraulic -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	3 474.4 2 971.0 1 758.2 1 221.7 1 163.0 1 062.8 807.3	32 24 26 28 29 32 31	53 41 47 48 49 50 48	81 75 79 81 82 78 73	98 99 99+ 99+ 99+ 98 (NA)	
32510	Brick and structural clay tile <sup>134</sup> -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	624.4 715.3 471.3 343.9 308.1 268.9 242.9	25 23 18 14 12 13 13	36 33 27 22 20 20 20	53 49 43 36 34 33 33	76 70 64 57 54 49 (NA)	
32530	Clay floor and wall tile -----	1982... 1977... 1972... 1967... 1963... 1958...	366.6 222.4 157.9 134.8 143.4 124.2	59 57 54 55 50 42	75 74 69 75 66 60	93 94 89 93 86 83	99 99+ 99+ 99+ 99 98	
32550	Clay refractories -----	1982... 1977... 1972... 1967... 1963... 1958...	628.7 540.1 298.9 235.3 180.7 158.2	41 46 48 43 42 44	62 63 64 61 60 60	82 84 87 83 82 80	94 96 98 97 97 94	
3259-	Structural clay products, n.e.c. -----	1982... 1977... 1972... 1967... 1963... 1958...	124.8 204.3 169.3 137.1 141.4 132.3	47 36 39 29 34 27	65 57 66 48 53 43	87 81 87 77 76 67	99 95 98 94 92 87	
32591	Vitrified clay sewer pipe and fittings -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	66.5 133.6 134.7 93.0 98.2 86.9 70.9	76 45 46 41 45 38 35	96 73 78 65 69 59 53	100 100 99 96 93 84 77	(X) (X) 100 100 100 100 (NA)	
32592	Other structural clay products, n.e.c. -----	1982... 1977... 1972... 1967... 1963... 1958...	52.9 63.0 28.8 39.7 39.9 45.4	41 26 28 32 30 27	62 43 45 44 41 41	88 (D) 76 68 61 57	100 99+ 99 92 87 81	

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
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32	STONE, CLAY, AND GLASS PRODUCTS—Con.						
3259- 32590	Structural clay products, n.e.c.—Con. Structural clay products, n.e.c., n.s.k. ....	1982... 5.4 1977... 7.7 1972... 5.8 1967... 4.4 1963... 3.3	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
32610	Vitreous and semivitreous plumbing fixtures, accessories, and fittings .....	1982... 419.8 1977... 367.8 1972... 248.4 1967... 148.9 1963... 143.8 1958... 130.5 1954... 116.6	62 59 58 61 56 54 65	83 79 79 81 76 75 83	98 97 97 98 97 95 98	100 99+ 100 100 100 100 (NA)	1 314 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
32620	Vitreous china and porcelain table and kitchen articles .....	1982... 204.8 1977... 140.9 1972... 81.9 1967... 69.6 1963... 51.9 1958... 46.9	63 66 69 66 62 58	87 92 89 85 82 77	99 99+ 99 97 99 98	100 100 100 100 100 100	1 246 (NA) (NA) (NA) (NA) (NA) (NA)
32630	Earthenware table and kitchen articles .....	1982... 91.3 1977... 90.8 1972... 58.0 1967... 46.7 1963... 58.2 1958... 53.5 1954... 70.8	53 52 54 51 52 40 34	71 78 87 82 80 66 55	95 99 100 99 99 96 86	100 100 (X) 100 100 100 (NA)	956 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
32640	Porcelain, steatite, and other ceramic electrical products .....	1982... 505.8 1977... 378.9 1972... 257.2 1967... 188.6 1963... 121.5 1958... 91.1 1954... 83.9	36 37 44 45 43 43 48	53 54 68 67 64 63 69	76 78 85 87 85 85 88	96 97 98 99 98 99 (NA)	477 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
32690	Pottery products, n.e.c. ....	1982... 450.3 1977... 240.8 1972... 148.7 1967... 96.0 1963... 81.4 1958... 75.0	30 20 17 17 18 12	41 31 30 28 27 19	56 47 52 48 47 34	74 67 73 71 67 55	308 (NA) (NA) (NA) (NA) (NA) (NA)
32710	Concrete block and brick .....	1982... 1 173.2 1977... 1 005.1 1972... 795.7 1967... 502.1 1963... 472.4 1958... 379.1 1954... 341.9	9 4 5 4 5 3 3	13 6 8 7 7 5 5	20 12 14 12 12 10 10	31 22 24 21 20 19 (NA)	34 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
3272-	Concrete products, n.e.c. ....	1982... 3 503.2 1977... 2 596.1 1972... 1 864.3 1967... 1 147.5 1963... 861.9 1958... 662.1	11 9 10 11 17 18	16 15 14 17 23 23	26 24 23 27 30 30	39 35 35 38 40 39	50 (NA) (NA) (NA) (NA) (NA) (NA)
32721	Concrete pipe .....	1982... 919.0 1977... 843.8 1972... 566.3 1967... 400.5 1963... 369.3 1958... 294.8 1954... 184.3	33 27 27 29 34 35 32	48 40 39 43 47 46 42	61 58 57 57 58 59 55	75 73 71 71 71 72 (NA)	367 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
32722	Precast concrete products .....	1982... 1 349.5 1977... 772.6 1972... 536.8 1967... 341.5 1963... 297.3	7 8 7 8 10	13 14 12 13 12	24 24 21 23 20	39 37 35 38 31	39 (NA) (NA) (NA) (NA)
32723	Prestressed concrete products .....	1982... 741.9 1977... 423.6 1972... 414.1 1967... 217.7 1963... 140.9	19 15 14 16 13	28 25 25 24 21	46 43 42 37 38	70 68 65 61 62	173 (NA) (NA) (NA) (NA)
32720	Concrete products, n.e.c., n.s.k. ....	1982... 492.8 1977... 556.1 1972... 347.0 1967... 187.8 1963... 54.4 1958... 80.3	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
32730	Ready-mixed concrete .....	1982... 7 544.9 1977... 5 679.9 1972... 3 556.6 1967... 2 330.5 1963... 1 970.7 1958... 1 468.6	5 4 5 5 4 2	8 8 9 9 7 3	16 14 16 15 13 6	24 22 24 23 21 11	16 (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.

Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
32	STONE, CLAY, AND GLASS PRODUCTS—Con.						
32740	Lime (including cost of shipping containers) ----- 1982 ..	517.8	33	50	80	99+	475
	1977 ..	473.5	34	49	77	99	(NA)
	1972 ..	223.5	36	52	79	99	(NA)
	1967 ..	163.5	33	51	77	98	(NA)
	1963 ..	136.9	35	53	78	98	(NA)
	1958 ..	109.0	36	53	76	95	(NA)
	1954 ..	93.9	34	54	79	(NA)	(NA)
3275-	Gypsum products ----- 1982 ..	1 178.2	76	87	96	99+	1 961
	1977 ..	932.1	78	90	98	99+	(NA)
	1972 ..	583.1	79	92	99	99+	(NA)
	1967 ..	362.4	78	92	99	99+	(NA)
	1963 ..	405.1	82	96	99	99+	(NA)
	1958 ..	344.2	86	95	99	99+	(NA)
	1954 ..	273.5	89	97	99	(NA)	(NA)
32751	Gypsum building materials ----- 1982 ..	1 076.5	77	88	98	100	1 984
	1977 ..	864.9	80	91	99	100	(NA)
	1972 ..	538.4	80	93	100	(X)	(NA)
	1967 ..	339.1	79	93	99	100	(NA)
	1963 ..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958 ..	333.0	87	97	99	100	(NA)
32752	Other gypsum products ----- 1982 ..	85.8	88	99	100	(X)	2 652
	1977 ..	54.0	(D)	100	(X)	(X)	(NA)
	1972 ..	40.4	88	99	100	(X)	(NA)
	1967 ..	19.4	92	98	100	(X)	(NA)
	1963 ..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958 ..	6.6	90	98	100	(X)	(NA)
32750	Gypsum products, n.s.k. ----- 1982 ..	15.9	(X)	(X)	(X)	(X)	(X)
	1977 ..	13.1	(X)	(X)	(X)	(X)	(NA)
	1972 ..	4.3	(X)	(X)	(X)	(X)	(NA)
	1967 ..	3.9	(X)	(X)	(X)	(X)	(NA)
	1963 ..	3.4	(X)	(X)	(X)	(X)	(NA)
	1958 ..	4.6	(X)	(X)	(X)	(X)	(NA)
3281-	Cut stone and stone products ----- 1982 ..	526.2	22	29	40	54	263
	1977 ..	385.5	14	19	29	42	(NA)
	1972 ..	286.8	18	23	34	47	(NA)
	1967 ..	211.4	16	24	35	50	(NA)
	1963 ..	190.9	20	26	38	51	(NA)
	1958 ..	191.1	14	20	(NA)	(NA)	(NA)
	1954 ..	166.8	12	19	28	(NA)	(NA)
32811	Dressed dimension granite ----- 1982 ..	296.0	36	45	60	78	758
	1977 ..	164.4	30	39	53	73	(NA)
	1972 ..	123.3	36	46	62	80	(NA)
	1967 ..	75.9	31	43	57	75	(NA)
	1963 ..	87.8	30	39	52	69	(NA)
	1958 ..	87.9	22	29	40	56	(NA)
	1954 ..	67.5	17	23	35	(NA)	(NA)
32812	Dressed dimension limestone ----- 1982 ..	42.9	37	53	84	100	532
	1977 ..	53.3	22	36	59	88	(NA)
	1972 ..	27.9	37	51	75	98	(NA)
	1967 ..	27.3	26	38	60	89	(NA)
	1963 ..	29.1	24	35	58	84	(NA)
	1958 ..	35.1	19	30	52	80	(NA)
	1954 ..	40.0	28	37	56	(NA)	(NA)
32813	Dressed dimension marble and other stone ----- 1982 ..	96.2	44	55	73	92	631
	1977 ..	83.6	28	41	58	79	(NA)
	1972 ..	44.2	33	45	67	90	(NA)
	1967 ..	53.8	34	44	63	81	(NA)
	1963 ..	63.6	34	42	56	75	(NA)
	1958 ..	55.7	26	36	52	70	(NA)
32810	Dressed dimension stone and stone products, n.s.k. ----- 1982 ..	91.1	(X)	(X)	(X)	(X)	(X)
	1977 ..	84.2	(X)	(X)	(X)	(X)	(NA)
	1972 ..	91.3	(X)	(X)	(X)	(X)	(NA)
	1967 ..	54.5	(X)	(X)	(X)	(X)	(NA)
	1963 ..	10.4	(X)	(X)	(X)	(X)	(NA)
	1958 ..	12.3	(X)	(X)	(X)	(X)	(NA)
3291-	Abrasive products ----- 1982 ..	2 135.7	55	64	74	84	1 014
	1977 ..	1 721.8	53	60	73	85	(NA)
	1972 ..	892.3	50	60	75	87	(NA)
	1967 ..	734.2	48	57	71	84	(NA)
	1963 ..	572.2	49	59	71	84	(NA)
32915	Nonmetallic sized grains, powders, and flour abrasive <sup>135</sup> ----- 1982 ..	409.7	63	76	91	100	1 489
32916	Nonmetallic abrasive products <sup>135</sup> ----- 1982 ..	610.8	49	61	76	91	1 009
32917	Nonmetallic coated abrasive products (1977 product class 32913) ----- 1982 ..	843.1	86	91	96	100	(D)
	1977 ..	627.8	85	91	96	100	(NA)
	1972 ..	292.5	82	90	97	100	(NA)
	1967 ..	225.4	77	84	94	99+	(NA)
	1963 ..	176.3	77	84	94	99+	(NA)
	1958 ..	127.4	73	81	92	99	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
32	STONE, CLAY, AND GLASS PRODUCTS—Con.							
3291- 32918	Abrasive products—Con. Metal abrasives, including scouring pads (1977 product class 32914) -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	173.9 176.8 107.4 75.0 63.2 54.7 45.9	62 54 59 64 68 65 57	80 77 79 79 80 77 69	99 98 98 95 96 94 90	100 100 100 100 100 99+ (NA)	1 287 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
32910	Abrasive products, n.s.k. -----	1982... 1977... 1972... 1967... 1963... 1958...	98.3 119.2 42.8 23.5 11.1 14.5	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3292-	Asbestos products <sup>136</sup> -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	841.0 960.1 744.2 564.6 506.1 419.7 <sup>137</sup> 323.1	48 47 48 51 54 53 51	68 65 69 72 74 68 67	89 89 88 91 93 90 90	99 98 98 99 99 98 (NA)	872 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
32922	Asbestos friction materials -----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	276.5 271.7 209.5 144.4 117.7 89.8 73.9	66 62 74 71 68 63 68	86 85 90 89 87 86 91	99+ 99+ 100 (D) (D) 99 99	100 100 (X) 100 100 100 (NA)	1 286 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
32928	Asphalt and vinyl asbestos floor tile <sup>11</sup> -----	1982... 1977...	297.3 232.1	(D) (D)	(D) 100	(X) (X)	(X) (X)	(D) (NA)
32929	Asbestos textiles, asbestos insulation, and asbestos-cement products <sup>11</sup> -----	1982... 1977...	246.9 429.1	67 72	83 87	98 98	100 100	1 940 (NA)
32920	Asbestos products, n.s.k. -----	1982... 1977... 1972... 1967... 1963... 1958...	20.3 27.0 5.3 3.6 1.1 5.0	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3293-	Gaskets, packing, and sealing devices -----	1982... 1977... 1972... 1967...	1 663.7 1 254.8 714.3 340.5	19 24 22 22	33 36 37 31	52 55 54 49	69 73 72 73	182 (NA) (NA) (NA)
32934	Compression packings <sup>138</sup> -----	1982...	99.8	76	90	99	100	2 029
32935	Nonmetallic gaskets and gasketing <sup>138</sup> -----	1982...	469.4	20	30	49	72	181
32936	Molded packings and seals <sup>138</sup> -----	1982...	403.5	25	38	63	88	291
32937	Metallic gaskets and machined seals <sup>138</sup> -----	1982...	225.5	42	64	86	99+	644
32938	Axial mechanical face seals <sup>138</sup> -----	1982...	89.8	(D)	96	100	(X)	(D)
32939	Rotary oil seals <sup>138</sup> -----	1982...	275.8	63	83	98	100	1 352
32930	Gaskets, packing, and sealing devices, n.s.k. -----	1982... 1977... 1972... 1967... 1963... 1958...	100.0 58.7 46.3 28.6 11.3 8.5	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
32950	Minerals and earths, ground or otherwise treated -----	1982... 1977... 1972... 1967... 1963...	1 252.9 911.0 389.1 270.7 203.1	30 26 25 26 24	43 40 34 34 36	63 62 52 50 53	82 79 71 71 72	336 (NA) (NA) (NA) (NA) (NA)
3296-	Mineral wool -----	1982... 1977... 1972... 1967... 1963...	2 215.2 1 684.0 738.6 425.0 356.0	75 72 72 70 68	87 83 86 82 82	95 94 96 94 94	98 99 99+ 99 99	2 025 (NA) (NA) (NA) (NA) (NA)
32963	Mineral wool structural insulation made from produced fiber, made in same establishment <sup>11</sup> -----	1982... 1977...	1 193.0 907.9	91 90	97 98	100 100	(X) (X)	(D) (NA)
32964	Mineral wool industrial insulation made from produced fiber, made in same establishment <sup>11</sup> -----	1982...	545.7	88	97	100	(X)	2 528

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
32	STONE, CLAY, AND GLASS PRODUCTS—Con.							
3296- 32964	Mineral wool—Con. Mineral wool industrial insulation made from produced fiber, made in same establishment <sup>11</sup> —Con.	1982__ 1977__	457.0	86	93	100	(X)	(NA)
32965	Mineral wool structural insulation made from purchased fiber, not made in same establishment <sup>11</sup> -----	1982__ 1977__	363.0 191.0	82 76	93 89	99 99	100 100	2 494 (NA)
32966	Mineral wool industrial insulation made from purchased fiber, not made in same establishment <sup>11</sup> -----	1982__ 1977__	80.0 111.9	53 48	69 73	97 96	100 100	1 111 (NA)
32960	Mineral wool, n.s.k.-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	33.4 16.0 8.1 12.9 7.5 5.7	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
32970	Nonclay refractories, except dead-burned magnesia-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	715.8 734.0 372.1 302.6 256.8 185.2	40 44 41 40 47 57	58 63 61 58 63 73	86 88 88 87 89 91	97 98 99 99 99+ 99	603 (NA) (NA) (NA) (NA) (NA) (NA)
32990	Nonmetallic mineral products, n.e.c.-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	453.8 391.1 169.7 87.5 83.0 53.7	35 38 30 31 29 21	49 49 39 44 42 33	64 65 55 62 61 52	78 77 70 79 80 72	431 (NA) (NA) (NA) (NA) (NA) (NA)
33	PRIMARY METAL INDUSTRIES							
3312- 33121	Blast furnaces and steel mills-----	1982__ 1977__ 1972__ 1967__ 1963__	2535 456.8 2539 368.0 2522 123.2 2520 869.1 2517 361.7	(25) (25) (25) (25) (25)	(25) (25) (25) (25) (25)	(25) (25) (25) (25) (25)	(25) (25) (25) (25) (25)	(NA) (NA) (NA) (NA) (NA)
33121	Coke oven and blast furnace products-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	1391 873.1 1393 032.2 1391 497.3 1391 256.4 1391 298.0 1391 150.3	48 54 56 55 60 54	69 68 73 74 76 69	92 93 94 92 93 90	100 100 100 99+ 99+ 99	877 (NA) (NA) (NA) (NA) (NA) (NA)
33122	Steel ingot and semifinished shapes and forms-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	3 082.0 4 039.3 2 502.9 2 526.5 2 030.1 1 846.9	48 58 58 67 70 71	69 75 79 83 84 85	90 92 96 96 97 96	99+ 99+ 99+ 100 100 99	816 (NA) (NA) (NA) (NA) (NA) (NA)
33123	Hot rolled sheet and strip-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	11 913.5 11 057.8 6 510.7 4 533.3 3 895.5 3 169.3	66 62 54 56 55 56	90 84 77 75 76 78	99+ 99+ 98 99 99 99	100 100 100 100 100 100	1 323 (NA) (NA) (NA) (NA) (NA) (NA)
33124	Hot rolled bars and bar shapes-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	8 199.2 9 140.9 5 612.8 4 456.4 3 607.8 2 879.7	50 59 59 62 63 64	62 70 70 74 74 76	80 84 85 88 89 89	96 97 98 99 99 99	803 (NA) (NA) (NA) (NA) (NA) (NA)
33125	Steel wire, produced in steel mills (also see code 33155)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	*392.4 *606.3 *397.6 *377.6 *361.8 *350.2	52 55 56 46 45 53	79 79 81 70 68 72	100 (D) 99 98 98 99	(X) 100 100 100 100 100	974 (NA) (NA) (NA) (NA) (NA) (NA)
33126	Steel pipe and tubes, produced in steel mills (also see code 33170)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	*3 561.5 *3 000.4 *1 501.0 *1 554.1 *1 137.5 *993.3	66 61 54 55 61 65	89 87 81 82 (D) 85	100 99+ 99 94 100 100	(X) 100 100 100 (X) (X)	1 414 (NA) (NA) (NA) (NA) (NA) (NA)
33127	Cold rolled steel sheet and strip, produced in steel mills (also see code 33167)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	*5 162.6 *6 953.9 *3 278.6 *2 607.0 *2 447.8 *1 838.4	53 50 45 42 46 46	85 77 72 69 73 72	100 (D) 99 99 99 98	(D) 100 100 100 100 100	1 022 (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
33	PRIMARY METAL INDUSTRIES—Con.							
3312- 33128	Blast furnaces and steel mills—Con. Cold finished steel bars and bar shapes, produced in steel mills (also see code 33168)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	<sup>5</sup> 358.5 <sup>5</sup> 421.9 <sup>5</sup> 268.7 <sup>5</sup> 256.6 <sup>5</sup> 199.4 <sup>5</sup> 130.6	63 58 67 61 55 58	88 84 87 81 77 80	100 100 100 100 (D) 100 (X)	(X) (X) (X) (X) (D) (X)	1 975 (NA) (NA) (NA) (NA) (NA) (NA)
3312A	Seamless rolled ring ferrous forgings, produced in steel mills (also see code 34627) <sup>11</sup> -----	1982__ 1977__	( <sup>5</sup> ) <sup>5</sup> 93.6	( <sup>5</sup> ) 100	( <sup>5</sup> ) (X)	( <sup>5</sup> ) (X)	( <sup>5</sup> ) (X)	(NA) (NA)
3312B	Open die or smith ferrous forgings, hammer or press, produced in steel mills (also see code 34628) <sup>11</sup> -----	1982__ 1977__	( <sup>5</sup> ) <sup>5</sup> 288.9	( <sup>5</sup> ) 71	( <sup>5</sup> ) 95	( <sup>5</sup> ) 100	( <sup>5</sup> ) (X)	(NA) (NA)
3312C	Other steel mill products, except wire products <sup>11</sup> -----	1982__ 1977__	395.6 561.1	83 93	95 99	100 100	(X) (X)	1 981 (NA)
33120	Blast furnace and steel mill products, n.s.k.-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__ 1954__	108.5 171.7 287.7 324.8 200.2 198.5 241.6	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA) (NA)
3313-	Electrometallurgical products-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	<sup>139</sup> 728.0 <sup>139</sup> 944.1 <sup>139</sup> 539.4 <sup>139</sup> 420.4 <sup>139</sup> 342.6 <sup>139</sup> 374.1	47 64 72 71 70 67	68 78 89 87 89 86	96 98 99+ 99+ 99+ 99	100 100 100 100 100 100	973 (NA) (NA) (NA) (NA) (NA) (NA)
33131	Ferromanganese-----	1982__ 1977__ 1972__ 1967__ 1963__	(D) 159.1 (D) (D) (D)	(D) 83 (D) (D) (D)	(D) 99 (D) (D) (D)	(X) 100 (D) (D) (D)	(X) (X) (D) (D) (D)	2 440 (NA) (NA) (NA) (NA)
33132	Ferrochromium-----	1982__ 1977__ 1972__ 1967__ 1963__	75.1 163.5 116.6 104.5 85.3	(D) 91 90 (D) 87	(D) (D) (D) 100 99+	(X) 100 100 (X) 100	(X) (X) (X) (X) (X)	2 455 (NA) (NA) (NA) (NA) (NA)
33133	Ferrosilicon-----	1982__ 1977__ 1972__ 1967__ 1963__	243.0 327.4 180.8 102.9 78.0	79 83 83 92 87	98 95 95 100 (D)	(D) 100 100 (X) 100	(X) (X) (X) (X) (X)	2 221 (NA) (NA) (NA) (NA) (NA)
33134	Other ferroalloy products produced in electric furnaces-----	1982__ 1977__ 1972__ 1967__ 1963__	(D) 290.2 (D) (D) (D)	(D) 61 (D) (D) (D)	(D) 91 (D) (D) (D)	(D) (D) (D) (D) (D)	(X) 100 (D) (D) (D)	1 232 (NA) (NA) (NA) (NA)
33130	Electrometallurgical products, n.s.k.-----	1982__ 1977__	43.3 3.9	(X) (X)	(X) (X)	(X) (X)	(X) (X)	(D) (NA)
3315-	Steel wire and related products-----	1982__ 1977__ 1972__ 1967__ 1963__	<sup>25</sup> 2 761.1 <sup>25</sup> 2 608.4 <sup>25</sup> 1 520.8 <sup>25</sup> 1 061.6 <sup>25</sup> 796.5	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> ) ( <sup>25</sup> )	218 (NA) (NA) (NA) (NA)
33151	Noninsulated ferrous wire rope, cable, and strand, produced in wiredrawing plants (also see code 34961)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	<sup>5</sup> 222.0 <sup>5</sup> 439.1 <sup>5</sup> 273.3 <sup>5</sup> 164.2 <sup>5</sup> 100.9 <sup>5</sup> 94.1	43 40 44 65 72 71	68 61 64 85 94 92	92 91 90 99+ 100 100	100 (D) 100 100 (X) (X)	702 (NA) (NA) (NA) (NA) (NA) (NA)
33152	Steel nails and spikes, produced in wiredrawing plants (also see code 34967)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	<sup>5</sup> 227.8 <sup>5</sup> 359.0 <sup>5</sup> 253.0 <sup>5</sup> 158.8 <sup>5</sup> 153.1 <sup>5</sup> 159.4	42 47 44 34 33 41	63 71 65 54 51 59	94 95 88 80 80 81	100 100 100 92 98 96	802 (NA) (NA) (NA) (NA) (NA) (NA)
33155	Steel wire, not produced in steel mills (also see code 33125)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	<sup>5</sup> 1 000.6 <sup>5</sup> 729.8 <sup>5</sup> 328.7 <sup>5</sup> 300.5 <sup>5</sup> 257.6 <sup>5</sup> 214.6	33 36 37 38 40 47	46 50 53 53 54 60	70 73 81 81 79 86	91 95 99 99+ 99 99	423 (NA) (NA) (NA) (NA) (NA) (NA)
33156	Fencing and fence gates, produced in wiredrawing plants (also see code 34966)-----	1982__ 1977__ 1972__ 1967__ 1963__ 1958__	<sup>5</sup> 301.6 <sup>5</sup> 280.3 <sup>5</sup> 176.8 <sup>5</sup> 75.8 <sup>5</sup> 58.3 <sup>5</sup> 48.0	39 46 40 50 51 64	62 72 64 72 74 88	93 97 94 99 99+ 100	100 100 100 100 100 (X)	630 (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
33	PRIMARY METAL INDUSTRIES—Con.							
3315-	Steel wire and related products—Con.							
33157	Ferrous wire cloth and other ferrous woven wire products, produced in wiredrawing plants (also see code 34964) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	\$68.0 \$84.5 \$53.6 \$35.4 \$24.3 \$25.9	66 66 58 58 64 66	92 94 88 87 96 92	100 100 100 100 100 100	(X) (X) (X) (X) (X) (X)	1 336 (NA) (NA) (NA) (NA) (NA) (NA)
33159	Other fabricated ferrous wire products, except springs, produced in wiredrawing plants (also see code 34968) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	\$547.2 \$639.5 \$390.0 \$293.7 \$181.6 \$143.2	36 29 26 33 45 55	60 48 47 52 66 79	87 76 76 77 89 99	100 97 97 96 99 100	565 (NA) (NA) (NA) (NA) (NA) (NA)
33150	Steel wire and related products, n.s.k. -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	93.9 76.2 45.4 33.2 20.7 6.1	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3316-	Cold finishing of steel shapes -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	\$2 803.4 \$2 562.8 \$1 571.8 \$945.6 \$685.3 \$461.5	40 37 36 35 38 39	54 55 52 51 56 60	74 80 79 73 80 83	93 97 98 95 98 (NA)	566 (NA) (NA) (NA) (NA) (NA) (NA)
33167	Cold rolled steel sheet and strip, not produced in steel mills (also see code 33127) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	\$1 815.3 \$1 628.5 \$988.5 \$554.9 \$408.5 \$253.2	50 48 48 41 44 49	67 69 68 57 64 70	90 92 92 85 91 95	100 100 100 100 100 100	963 (NA) (NA) (NA) (NA) (NA) (NA)
33168	Cold finished steel bars and bar shapes, not produced in steel mills (also see code 33128) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	\$905.8 \$909.2 \$558.9 \$372.6 \$273.4 \$208.3	46 50 48 64 70 70	64 72 69 78 82 81	87 94 95 97 98 98	99+ 100 100 100 100 100	763 (NA) (NA) (NA) (NA) (NA) (NA)
33160	Cold finishing of steel shapes, n.s.k. -----	1982.. 1977.. 1972.. 1967.. 1963..	82.4 25.1 24.5 18.3 3.5	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
33170	Steel pipe and tubes (1977 product class 33176) (also see code 33126) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	\$3 657.1 \$2 620.3 \$1 257.5 \$1 075.0 \$750.0 \$730.3	22 24 23 24 25 36	38 37 38 38 41 54	64 65 66 67 66 78	88 88 90 89 90 94	274 (NA) (NA) (NA) (NA) (NA) (NA)
3321-	Gray iron castings <sup>140</sup> -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958.. 1954..	6 287.7 7 835.2 4 032.6 2 740.4 2 046.3 1 527.9 1 513.5	29 34 34 26 26 22 25	36 43 42 35 35 31 33	51 59 57 49 51 46 45	67 73 70 63 65 61 (NA)	380 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
33211	Ductile iron pressure pipe and fittings (1977 product class 3321A) <sup>11</sup> -----	1982.. 1977..	541.6 497.6	82 84	96 97	99+ 99+	100 100	1 999 (NA)
33212	Other ductile iron castings (1977 product class 3321B) <sup>11</sup> -----	1982.. 1977..	1 113.7 1 125.6	42 53	53 62	71 76	86 88	939 (NA)
33216	Gray iron molds and stools for heavy steel ingots -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	345.8 551.4 312.0 242.9 187.8 147.7	77 82 72 74 82 81	91 98 93 95 97 94	100 100 99 100 100 99	(X) (X) 100 (X) (X) 100	1 704 (NA) (NA) (NA) (NA) (NA) (NA)
33217	Cast iron pressure pipe and fittings -----	1982.. 1977.. 1972..	190.5 177.7 245.4	43 46 62	64 74 90	91 95 99	99+ 100 100	668 (NA) (NA)
33218	Cast iron soil pipe and fittings, gray iron (1967 product class 33213) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	181.6 200.3 220.2 156.0 152.1 119.8	78 74 76 69 62 39	93 90 91 86 78 60	99+ 99+ 100 99 94 85	100 100 (X) 100 100 100	2 605 (NA) (NA) (NA) (NA) (NA) (NA)
33219	Other gray iron castings <sup>11</sup> -----	1982.. 1977.. 1972..	3 707.9 5 081.9 2 543.7	35 42 39	43 51 47	55 60 56	69 73 68	532 (NA) (NA)

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
33	PRIMARY METAL INDUSTRIES—Con.						
3321- 33210	Gray iron castings <sup>140</sup> —Con. Gray and ductile iron castings, n.s.k. -----	1982__ 206.6 1977__ 200.8 1972__ 105.8 1967__ 117.5 1963__ 43.0 1958__ 69.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3322-	Malleable iron castings -----	1982__ 370.8 1977__ 669.5 1972__ 484.8 1967__ 417.2 1963__ 313.6 1958__ 203.3 1954__ 204.9	50 54 51 43 45 37 42	65 68 62 52 54 51 53	87 84 79 71 72 69 70	99+ 99 96 93 92 91 (NA)	1 468 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
33221	Standard malleable castings -----	1982__ 208.0 1977__ 453.0 1972__ 345.8	42 44 44	61 61 56	86 81 76	100 99+ 98	720 (NA) (NA)
33222	Pearlitic malleable castings -----	1982__ 150.6 1977__ 208.7 1972__ 129.3	86 85 80	97 92 89	100 99 98	(X) 100 100	(D) (NA) (NA)
33220	Malleable iron castings, n.s.k. -----	1982__ 12.2 1977__ 7.8 1972__ 9.7	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
33240	Steel investment castings (1967 product class 33231) -----	1982__ 963.6 1977__ 434.1 1972__ 237.7 1967__ 167.6	49 50 55 42	58 59 65 54	70 76 83 76	89 93 97 97	1 178 (NA) (NA) (NA) (NA)
3325-	Steel castings, n.e.c. -----	1982__ 2 009.7 1977__ 2 205.8 1972__ 1 052.8	20 26 22	30 36 32	48 52 51	71 73 73	177 (NA) (NA)
33252	Carbon steel castings, except investment (1967 product class 33232) -----	1982__ 982.0 1977__ 1 250.9 1972__ 541.0 1967__ 619.0	26 35 30 27	40 45 41 39	62 64 61 60	85 87 84 83	339 (NA) (NA) (NA) (NA)
33254	High alloy steel castings, except investment -----	1982__ 496.0 1977__ 367.0 1972__ 127.8	32 38 26	45 50 40	66 70 68	89 90 94	392 (NA) (NA)
33255	Other alloy steel castings, except investment <sup>11</sup> -----	1982__ 465.1 1977__ 521.0 1972__ 349.3	32 34 27	47 51 41	73 75 69	94 95 91	424 (NA) (NA)
33250	Steel castings, n.e.c., n.s.k. -----	1982__ 66.5 1977__ 66.9 1972__ 34.7	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3331-	Primary copper -----	1982__ 2 978.3 1977__ 3 254.6 1972__ 2 338.8 1967__ 1 018.5 1963__ 1 049.9 1958__ 682.1	92 84 83 (NA) (NA) (NA)	99+ (D) 99 (NA) (NA) (NA)	100 100 100 (NA) (NA) (NA)	(X) (X) (X) (NA) (NA) (NA)	2 483 (NA) (NA) (NA) (NA) (NA) (NA)
33311	Copper smelter products -----	1982__ 1 454.8 1977__ 1 566.2 1972__ 1 360.8 1967__ 547.6 1963__ 628.5 1958__ 361.6 1954__ 369.4	(D) 91 87 89 89 95 94	(D) (D) (D) 99+ (D) 99 (D)	(D) 100 100 100 100 100 100	(X) (X) (X) (X) (X) (X) (X)	2 565 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
33312	Refined primary copper (also see code 33412) -----	1982__ <sup>51</sup> 522.5 1977__ <sup>51</sup> 687.9 1972__ <sup>59</sup> 77.9 1967__ <sup>54</sup> 53.6 1963__ <sup>54</sup> 21.4 1958__ <sup>53</sup> 20.5	90 77 82 79 84 90	99+ (D) 100 (D) (D) (D)	100 100 (X) (D) (D) 100	(X) (X) (X) (X) (X) (X)	2 543 (NA) (NA) (NA) (NA) (NA) (NA)
33310	Primary copper, n.s.k. -----	1982__ 1.0 1977__ .5 1972__ .1 1967__ 17.3	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
3332-	Primary lead -----	1982__ 545.0 1977__ 530.6 1972__ (D) 1967__ (D) 1963__ (D) 1958__ (D)	(D) (D) (D) (D) (D) (D)	(D) 100 (D) (D) (D) (D)	(X) (X) (D) (D) (D) (D)	(X) (X) (D) (D) (D) (D)	(D) (NA) (NA) (NA) (NA) (NA) (NA)
33321	Lead smelter products -----	1982__ (D) 1977__ (D) 1972__ (D) 1967__ (D) 1963__ (D) 1958__ (D)	(D) (D) (D) (D) (D) (D)	(X) (D) (D) (D) (D) (D)	(X) (D) (D) (D) (D) (D)	(X) (D) (D) (D) (D) (D)	(D) (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
33	PRIMARY METAL INDUSTRIES—Con.							
3332- 33323	Primary lead—Con. Refined primary lead (also see code 33413) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	<sup>5</sup> (D) <sup>5</sup> (D) <sup>5</sup> 179.4 <sup>5</sup> 123.3 <sup>5</sup> 74.5 <sup>5</sup> 104.8	(D) (D) 93 76 100 (D)	(X) (D) 99+ 100 (X) 100	(X) (D) 100 (X) (X) (X)	(D) (NA) (NA) (NA) (NA) (NA)	
3333-	Primary zinc -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	280.2 366.3 326.6 285.5 265.1 232.5	78 79 68 (NA) (NA) (NA)	99 (D) 96 (NA) (NA) (NA)	100 100 100 (NA) (NA) (NA)	(X) (X) (X) (NA) (NA) (NA)	
33331	Zinc residues and other zinc smelter products-----	1982.. 1977.. 1972.. 1967.. 1963.. 1958.. 1954..	30.2 39.9 36.9 23.8 34.8 25.8 20.5	88 88 84 76 85 86 91	98 98 98 97 98 98 97	100 100 100 100 100 100 100	(X) (X) (X) (X) (X) (X) (X)	
33334	Refined primary zinc and zinc-base alloys (also see code 33414) ---	1982.. 1977.. 1972.. 1967.. 1963..	<sup>5</sup> 249.9 <sup>5</sup> 326.4 <sup>5</sup> 289.7 <sup>5</sup> 261.7 <sup>5</sup> 230.3	78 (D) 69 61 58	99+ 100 (D) 92 90	100 (X) 100 100 100	(X) (X) (X) (X) (X)	
3334-	Primary aluminum -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	<sup>5</sup> 4 500.6 <sup>5</sup> 4 291.4 <sup>5</sup> 1 754.6 <sup>5</sup> 1 963.5 <sup>5</sup> 1 069.6 <sup>5</sup> 810.9	67 76 80 91 93 82	91 93 94 100 (D) 90	100 100 100 (X) 100 (NA)	(X) (X) (X) (X) (X) (NA)	
33347	Primary aluminum ingot, excluding billet (also see codes 33417 and 33553) -----	1982.. 1977.. 1972.. 1967.. 1963..	<sup>5</sup> 4 007.0 <sup>5</sup> 3 721.5 <sup>5</sup> 1 509.7 <sup>5</sup> 1 324.1 <sup>5</sup> 946.8	70 79 81 91 93	92 94 95 100 (D)	100 100 100 (X) 100	(X) (X) (X) (X) (X)	
33348	Primary aluminum extrusion billet (also see codes 33418 and 33554) -----	1982.. 1977.. 1972.. 1967.. 1963..	<sup>5</sup> 492.1 <sup>5</sup> 570.0 <sup>5</sup> 244.8 <sup>5</sup> 211.4 <sup>5</sup> 122.8	59 60 75 84 (D)	(D) (D) (D) 100 100	100 100 100 (X) (X)	(X) (X) (X) (NA) (X)	
33340	Primary aluminum, n.s.k. -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	1.5 - - - - -	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)	
3339-	Primary nonferrous metals, n.e.c. -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	1 830.5 1 431.9 759.4 422.1 439.4 (NA)	65 60 58 (NA) (NA) (NA)	79 76 73 (NA) (NA) (NA)	95 95 91 (NA) (NA) (NA)	99 99+ 99 (NA) (NA) (NA)	
33395	Refined precious metals and precious alloys (also see code 33415) -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	<sup>5</sup> 921.3 <sup>5</sup> 464.8 (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(5) (5) (5) (5) (5) (5)	(NA) (NA) (NA) (NA) (NA) (NA)	
33398	Other primary nonferrous metal, n.e.c. (also see code 33416) <sup>141</sup> ---	1982..	(5)	(5)	(5)	(5)	(5)	(NA)
33399	Chromium and silicon (unalloyed) (also see code 33416) <sup>141</sup> -----	1982..	(5)	(5)	(5)	(X)	(X)	(NA)
33390	Primary nonferrous metals, n.e.c., n.s.k. -----	1982.. 1977.. 1967.. 1963.. 1958..	31.6 27.1 8.3 (X) .1	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	
3341-	Secondary nonferrous metals -----	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	4 385.9 3 194.9 1 826.1 1 243.3 1 190.3 (NA)	23 23 23 (NA) (NA) (NA)	33 36 35 (NA) (NA) (NA)	53 54 58 (NA) (NA) (NA)	74 74 78 (NA) (NA) (NA)	
33412	Secondary copper and copper-base alloys (also see code 33312) ---	1982.. 1977.. 1972.. 1967.. 1963.. 1958..	<sup>5</sup> 866.5 <sup>5</sup> 616.6 <sup>5</sup> 510.9 <sup>5</sup> 364.8 <sup>5</sup> 247.2 <sup>5</sup> 159.2	52 47 39 40 42 45	72 69 62 60 62 60	91 94 88 84 85 84	100 100 100 99+ 99 100	

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
33	PRIMARY METAL INDUSTRIES—Con.							
3341- 33413	Secondary nonferrous metals—Con. Secondary lead, lead and tin-base alloys (also see code 33323) -----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>5</sup> 589.9 <sup>5</sup> 680.3 <sup>5</sup> 275.8 <sup>5</sup> 235.6 <sup>5</sup> 201.9 <sup>5</sup> 176.1	43 51 61 51 55 (D)	62 68 75 60 66 64	87 89 90 76 82 79	99 99+ 99+ 99+ 95 93	721 (NA) (NA) (NA) (NA) (NA) (NA)
33414	Secondary zinc and zinc-base alloys (also see code 33334) -----	1982... 1977... 1972... 1967... 1963...	<sup>5</sup> 204.3 <sup>5</sup> 144.7 <sup>5</sup> 114.6 <sup>5</sup> 53.6 <sup>5</sup> 43.4	44 53 48 48 50	65 75 67 68 68	94 96 93 95 91	100 100 100 100 99	705 (NA) (NA) (NA) (NA) (NA)
33415	Secondary precious metals and precious metal alloys (also see code 33395) -----	1982... 1977... 1972... 1967... 1963... 1958...	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	(NA) (NA) (NA) (NA) (NA) (NA)
33416	Other secondary nonferrous metals and their alloys (also see codes 33398 and 33399) -----	1982... 1977... 1972... 1967... 1963... 1958...	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> ) ( <sup>5</sup> )	(NA) (NA) (NA) (NA) (NA) (NA)
33417	Secondary aluminum ingot, excluding billet (also see codes 33347 and 33553) -----	1982... 1977... 1972... 1967... 1963... 1958...	<sup>5</sup> (D) <sup>5</sup> 978.3 <sup>5</sup> 341.0 <sup>5</sup> 302.9 <sup>5</sup> 238.9	(D) 52 50 44 44	(D) 67 69 64 62	(D) 83 89 88 85	(D) 99 99+ 99+ 99	(NA) (NA) (NA) (NA) (NA) (NA)
33418	Secondary aluminum extrusion billet (also see codes 33348 and 33554) -----	1982... 1977... 1972... 1967... 1963...	<sup>5</sup> (D) <sup>5</sup> 112.4 <sup>5</sup> 28.7 <sup>5</sup> 39.3 <sup>5</sup> 13.9	(D) 80 80 72 85	(D) (D) (D) 97 99	(D) 100 100 100 100	(X) (X) (X) (X) (X)	(D) (NA) (NA) (NA) (NA) (NA)
33410	Secondary aluminum, n.s.k. -----	1982... 1977... 1972... 1967... 1963... 1958...	145.8 251.0 167.7 75.1 24.2 22.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
3351-	Copper rolling and drawing -----	1982... 1977... 1972... 1967... 1963... 1958...	2 941.6 3 456.4 2 812.5 2 216.8 1 544.5 1 034.4	33 34 41 40 45 46	52 57 60 61 65 66	81 83 82 84 86 85	96 97 96 97 98 98	467 (NA) (NA) (NA) (NA) (NA) (NA)
33511	Copper and copper-base alloy wire -----	1982... 1977... 1972... 1967... 1963... 1958...	346.4 170.7 140.9 95.6 73.2 47.8	53 54 43 43 50 48	76 81 70 67 71 72	97 99 96 95 94 94	100 100 100 100 100 100	1 066 (NA) (NA) (NA) (NA) (NA) (NA)
33513	Copper and copper-base alloy rod, bar, and shapes <sup>11</sup> -----	1982... 1977... 1972...	921.0 1 411.6 1 170.9	51 52 52	73 70 71	96 96 95	100 100 100	955 (NA) (NA)
33514	Copper and copper-base alloy sheet, strip, and plate <sup>11</sup> -----	1982... 1977... 1972...	800.8 937.3 705.9	61 60 64	80 79 82	99 98 99	100 100 100	1 253 (NA) (NA)
33515	Copper and copper-base alloy pipe and tube <sup>11</sup> -----	1982... 1977... 1972...	845.0 895.5 764.0	55 49 43	76 77 72	97 98 94	100 100 100	931 (NA) (NA)
33510	Rolled and drawn copper, n.s.k. -----	1982... 1977... 1972... 1967...	28.3 41.3 30.0 16.1	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
3353-	Aluminum sheet, plate, and foil <sup>142</sup> -----	1982... 1977... 1972...	6 519.7 5 358.8 2 227.7	73 73 70	90 90 86	99 99+ 99	100 100 100	1 618 (NA) (NA)
33531	Aluminum plate <sup>11</sup> -----	1982... 1977... 1972...	378.6 247.3 89.4	86 87 91	(D) (D) (D)	100 100 100	(X) (X) (X)	2 812 (NA) (NA)
33532	Aluminum sheet and strip <sup>11</sup> -----	1982... 1977... 1972...	5 555.5 4 569.6 1 902.5	76 75 71	92 91 88	99+ 100 100	100 (X) (X)	1 688 (NA) (NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
33	PRIMARY METAL INDUSTRIES—Con.						
3353-	Aluminum sheet, plate, and foil <sup>142</sup> —Con.						
33533	Plain aluminum foil (1967 product class 33523)-----	1982-- 545.1	70	(D)	100	(X)	1 682
		1977-- 476.6	74	95	100	(X)	(NA)
		1972-- 215.1	70	93	100	(X)	(NA)
		1967-- 184.6	80	96	100	(X)	(NA)
		1963-- 129.4	77	95	100	(X)	(NA)
		1958-- 140.5	80	(D)	(X)	(X)	(NA)
33534	Aluminum welded tube-----	1982-- 29.8	(D)	(D)	(X)	(X)	(D)
		1977-- 61.6	76	100	(X)	(X)	(NA)
		1972-- 34.3	82	100	(X)	(X)	(NA)
33530	Aluminum sheet, plate, and foil, n.s.k.-----	1982-- 10.8	(X)	(X)	(X)	(X)	(X)
		1977-- 3.7	(X)	(X)	(X)	(X)	(NA)
3354-	Aluminum extruded products <sup>142</sup> -----	1982-- 2 550.5	35	53	72	90	451
		1977-- 1 928.2	37	54	73	91	(NA)
		1972-- 1 020.7	36	51	72	89	(NA)
33541	Extruded aluminum rod, bar, and other shapes (1967 product class 33525)-----	1982-- 2 100.4	37	56	74	92	486
		1977-- 1 541.9	37	56	76	94	(NA)
		1972-- 781.4	35	52	74	93	(NA)
		1967-- 565.7	45	54	73	92	(NA)
		1963-- 397.3	38	47	66	90	(NA)
		1958-- 272.1	53	64	79	97	(NA)
33542	Aluminum extruded and drawn tube <sup>11</sup> -----	1982-- 430.1	49	68	92	100	806
		1977-- 333.0	59	76	95	100	(NA)
		1972-- 212.3	55	73	92	100	(NA)
33540	Aluminum extruded products, n.s.k.-----	1982-- 20.1	(X)	(X)	(X)	(X)	(X)
		1977-- 53.3	(X)	(X)	(X)	(X)	(NA)
		1972-- 26.9	(X)	(X)	(X)	(X)	(NA)
3355-	Aluminum rolling and drawing, n.e.c. <sup>142</sup> -----	1982-- \$919.1	72	88	98	100	1 995
		1977-- \$1 367.5	81	93	99+	100	(NA)
		1972-- \$524.6	82	(D)	100	(X)	(NA)
33551	Aluminum and aluminum-base alloy wire (also see code 33571)-----	1982-- \$201.5	91	99+	100	(X)	(D)
		1977-- \$124.1	84	99	100	(X)	(NA)
		1972-- \$61.1	87	100	(X)	(X)	(NA)
		1967-- \$75.0	83	(D)	100	(X)	(NA)
		1963-- \$56.9	87	(D)	100	(X)	(NA)
33552	Rolled aluminum rod, bar, and structural shapes-----	1982-- 285.5	83	99	100	(X)	1 974
		1977-- 530.0	88	99+	100	(X)	(NA)
		1972-- 295.8	87	99	100	(X)	(NA)
		1967-- 257.6	83	98	100	(X)	(NA)
		1963-- 145.2	96	(D)	100	(X)	(NA)
		1958-- 110.5	93	99	100	(X)	(NA)
33553	Aluminum ingot, except extrusion billet (also see codes 33347 and 33417)-----	1982-- \$ (D)	(D)	(D)	(D)	(X)	(D)
		1977-- \$ (D)	(D)	(D)	(D)	(D)	(NA)
		1972-- \$121.1	(D)	(D)	(D)	(D)	(NA)
		1967-- \$55.4	(D)	(D)	100	(X)	(NA)
		1963-- \$49.0	(D)	99	100	(X)	(NA)
33554	Aluminum extrusion billet (also see codes 33348 and 33418)-----	1982-- \$ (D)	(D)	(D)	(D)	(X)	1 331
		1977-- \$ (D)	(D)	(D)	(D)	(X)	(NA)
		1972-- \$46.6	(D)	(D)	(D)	(D)	(NA)
		1967-- \$30.4	93	(D)	100	(X)	(NA)
		1963-- \$48.7	88	98	100	(X)	(NA)
33550	Aluminum rolling and drawing, n.e.c., n.s.k.-----	1982-- 19.0	(X)	(X)	(X)	(X)	(D)
		1977-- 3.9	(X)	(X)	(X)	(X)	(NA)
3356-	Nonferrous rolling and drawing, n.e.c.-----	1982-- 3 305.0	38	59	82	95	555
		1977-- 2 552.2	43	56	77	92	(NA)
		1972-- 1 091.2	42	55	77	93	(NA)
		1967-- 971.5	47	61	78	95	(NA)
		1963-- 597.4	47	60	77	93	(NA)
33561	Nickel and nickel-base alloy mill shapes <sup>143</sup> -----	1982-- 637.3	80	95	100	(X)	2 245
		1977-- 873.2	86	97	(D)	100	(NA)
		1972-- 381.8	85	95	(D)	100	(NA)
33562	Titanium mill shapes <sup>143</sup> -----	1982-- 609.2	82	95	99+	100	2 761
		1977-- 250.7	82	96	100	(X)	(NA)
		1972-- 120.4	77	95	100	(X)	(NA)
33563	Precious metal mill shapes <sup>143</sup> -----	1982-- 1 261.6	77	93	99+	100	2 002
		1977-- 686.9	79	92	100	(X)	(NA)
		1972-- 364.1	88	97	100	(X)	(NA)
33569	All other nonferrous metal mill shapes (also see code 33573) <sup>143</sup> ----	1982-- 144757.2	43	61	84	97	649
		1977-- 144662.1	27	43	73	97	(NA)
		1972-- 144248.8	37	55	80	99	(NA)
33560	Rolled and drawn nonferrous metals, n.e.c., n.s.k.-----	1982-- 39.7	(X)	(X)	(X)	(X)	(X)
		1977-- 78.8	(X)	(X)	(X)	(X)	(NA)
		1972-- 87.4	(X)	(X)	(X)	(X)	(NA)
3357-	Nonferrous wire drawing and insulating-----	1982-- \$8 188.1	30	41	64	83	400
		1977-- \$6 460.3	37	52	74	89	(NA)
		1972-- \$4 208.2	40	56	77	91	(NA)
		1967-- \$3 389.6	38	54	75	91	(NA)
		1963-- \$2 000.4	42	60	77	90	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
33	PRIMARY METAL INDUSTRIES—Con.						
3357-	Nonferrous wire drawing and insulating—Con.						
	1958--	\$ <sup>1</sup> 481.0	38	54	72	89	(NA)
33571	Aluminum and aluminum-base alloy wire and cable, produced in nonferrous wire drawing plants (also see code 33551) -----						
	1982--	\$284.9	74	91	100	(X)	1 703
	1977--	\$263.4	64	87	(D)	100	(NA)
	1972--	\$155.2	64	85	99	100	(NA)
	1967--	\$176.9	67	92	99+	100	(NA)
	1963--	\$71.0	80	95	99+	100	(NA)
	1958--	\$54.0	(D)	94	99	100	(NA)
33572	Copper and copper-base alloy wire -----						
	1982--	402.3	47	70	94	100	769
	1977--	553.2	51	73	94	100	(NA)
	1972--	353.4	56	80	96	100	(NA)
	1967--	372.8	68	82	96	100	(NA)
	1963--	245.0	67	81	95	100	(NA)
	1958--	159.8	65	82	96	100	(NA)
33573	Other bare nonferrous metal wire (also see code 33569) -----						
	1982--	<sup>144</sup> 116.1	82	94	100	(X)	1 793
	1977--	<sup>144</sup> 117.9	82	93	100	(X)	(NA)
	1972--	<sup>144</sup> 76.5	58	77	98	100	(NA)
	1967--	<sup>144</sup> 40.5	69	86	99+	100	(NA)
	1963--	<sup>144</sup> 33.2	67	83	99	100	(NA)
33575	Nonferrous wire cloth and other woven wire products, produced in wire drawing plants (also see code 34965) -----						
	1982--	\$39.1	(D)	100	(X)	(X)	(D)
	1977--	\$38.1	78	(D)	100	(X)	(NA)
	1972--	\$44.3	57	90	100	(X)	(NA)
	1967--	\$21.8	60	(D)	100	(X)	(NA)
	1963--	\$21.2	65	(D)	100	(X)	(NA)
33576	Apparatus wire and cord and flexible cord sets, produced in wire drawing plants (also see code 36996) -----						
	1982--	\$477.6	39	58	82	99+	573
	1977--	\$447.8	50	73	92	(D)	(NA)
	1972--	\$266.7	56	76	94	100	(NA)
	1967--	\$184.2	46	72	95	100	(NA)
	1963--	\$101.7	37	57	88	(D)	(NA)
	1958--	\$66.2	37	56	89	99	(NA)
33577	Magnet wire -----						
	1982--	747.0	68	88	99	100	1 471
	1977--	754.4	72	90	99	100	(NA)
	1972--	532.9	62	87	99	100	(NA)
	1967--	449.6	59	88	99	100	(NA)
	1963--	258.3	60	84	99	100	(NA)
	1958--	183.4	52	77	96	100	(NA)
33578	Power wire and cable -----						
	1982--	854.5	36	59	90	100	567
	1977--	705.9	40	59	90	100	(NA)
	1972--	490.0	45	65	91	100	(NA)
	1967--	424.0	47	67	95	100	(NA)
	1963--	218.8	44	66	93	100	(NA)
	1958--	194.8	45	68	93	100	(NA)
33579	Fiber optic cable <sup>145</sup> -----						
	1982--	88.6	87	95	100	(X)	(D)
3357A	Electronic wire and cable <sup>11</sup> -----						
	1982--	1 304.4	38	50	70	93	509
	1977--	478.9	26	40	67	92	(NA)
3357B	Telephone and telegraph wire and cable <sup>11</sup> -----						
	1982--	1 815.2	84	94	99	100	(D)
	1977--	1 600.2	(D)	95	99	100	(NA)
3357C	Control and signal wire and cable <sup>11</sup> -----						
	1982--	248.8	44	61	90	100	787
	1977--	128.2	36	56	92	100	(NA)
3357D	Building wire and cable <sup>11</sup> -----						
	1982--	1 083.6	43	61	92	100	661
	1977--	890.2	37	58	89	100	(NA)
3357E	Other insulated wire and cable, including automotive <sup>11</sup> -----						
	1982--	550.6	30	48	86	100	452
	1977--	431.7	38	56	85	99+	(NA)
33570	Nonferrous wire drawing and insulating, n.s.k. <sup>145</sup> -----						
	1982--	175.4	(X)	(X)	(X)	(X)	(X)
3361-	Aluminum castings -----						
	1982--	<sup>1402</sup> 810.8	16	21	33	49	104
	1977--	<sup>1402</sup> 294.2	23	29	40	55	(NA)
	1972--	<sup>1401</sup> 172.2	22	28	39	53	(NA)
	1967--	<sup>140</sup> 885.9	23	30	39	51	(NA)
	1963--	<sup>140</sup> 607.0	30	37	45	56	(NA)
	1958--	399.6	19	25	37	51	(NA)
33611	Aluminum and aluminum-base alloy die castings -----						
	1982--	1 414.5	25	34	49	68	226
	1977--	1 086.8	29	39	54	74	(NA)
	1972--	532.6	39	50	67	83	(NA)
33612	Other aluminum and aluminum-base castings -----						
	1982--	1 256.4	14	23	38	59	108
	1977--	1 055.0	26	34	49	67	(NA)
	1972--	509.7	17	25	39	58	(NA)
33610	Aluminum foundries, n.s.k. -----						
	1982--	140.0	(X)	(X)	(X)	(X)	(X)
	1977--	152.5	(X)	(X)	(X)	(X)	(NA)
	1972--	129.9	(X)	(X)	(X)	(X)	(NA)
33620	Copper and copper-base alloy castings -----						
	1982--	<sup>1407</sup> 114.7	13	20	34	53	87
	1977--	<sup>1406</sup> 156.6	14	22	34	52	(NA)
	1972--	<sup>140</sup> 467.2	14	22	34	52	(NA)
	1967--	<sup>140</sup> 432.3	15	24	38	55	(NA)
	1963--	<sup>140</sup> 299.8	17	25	40	55	(NA)
	1958--	<sup>140</sup> 222.8	18	25	37	51	(NA)
3369-	Nonferrous castings, n.e.c. -----						
	1982--	<sup>1409</sup> 87.0	22	28	40	60	219
	1977--	<sup>1408</sup> 78.1	19	26	41	60	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
33	PRIMARY METAL INDUSTRIES—Con.						
3369-	Nonferrous castings, n.e.c.—Con.						
	1972... 140 602.2	24	32	46	64	(NA)	
	1967... 140 551.3	28	37	50	66	(NA)	
	1963... 140 306.5	20	27	41	59	(NA)	
	1958... 140 233.2	20	30	46	64	(NA)	
33691	Zinc and zinc-base alloy castings -----						
	1982... 563.1	16	23	41	68	137	
	1977... 609.9	21	30	49	70	(NA)	
	1972... 401.7	26	37	55	76	(NA)	
	1967... 323.3	34	43	60	78	(NA)	
33692	Magnesium and magnesium-base alloy <sup>11</sup> -----						
	1982... 92.4	45	62	89	100	807	
	1977... 83.3	40	58	85	99 +	(NA)	
	1972... 41.3	44	64	89	100	(NA)	
33693	Other nonferrous castings <sup>11</sup> -----						
	1982... 259.1	68	78	89	98	2 395	
	1977... 138.8	52	66	88	99	(NA)	
	1972... 94.8	68	81	94	99 +	(NA)	
33690	Nonferrous castings, n.e.c., n.s.k. -----						
	1982... 72.4	(X)	(X)	(X)	(X)	(X)	
	1977... 46.1	(X)	(X)	(X)	(X)	(NA)	
	1972... 64.3	(X)	(X)	(X)	(X)	(NA)	
	1967... 49.5	(X)	(X)	(X)	(X)	(NA)	
33980	Metal heat treating (1967 product class 33996) <sup>146</sup> -----						
	1982... 1471 105.9	(NA)	(NA)	(NA)	(NA)	(NA)	
	1977... 1477 704.1	(NA)	(NA)	(NA)	(NA)	(NA)	
	1972... 1474 462.9	(NA)	(NA)	(NA)	(NA)	(NA)	
	1967... 1472 274.9	(NA)	(NA)	(NA)	(NA)	(NA)	
	1963... 1471 140.3	(NA)	(NA)	(NA)	(NA)	(NA)	
	1958... 1478 85.3	(NA)	(NA)	(NA)	(NA)	(NA)	
3399-	Primary metal products, n.e.c. <sup>146</sup> -----						
	1982... 959.0	27	42	64	84	301	
	1977... 967.5	25	39	58	76	(NA)	
	1972... 432.5	28	42	64	84	(NA)	
33991	Metal powders, paste, and flakes -----						
	1982... 799.1	29	47	74	94	383	
	1977... 702.2	34	52	76	94	(NA)	
	1972... 329.3	31	50	75	93	(NA)	
	1967... 227.9	38	57	81	96	(NA)	
	1963... 106.8	32	54	80	96	(NA)	
	1958... 55.1	39	57	85	99	(NA)	
	1954... 70.1	30	45	71	(NA)	(NA)	
33992	Primary metal products, n.e.c. -----						
	1982... 119.9	31	46	77	99 +	456	
	1977... 144.7	29	43	74	99	(NA)	
	1972... 63.0	29	47	75	98	(NA)	
	1967... 43.1	29	47	78	98	(NA)	
	1963... 11.2	40	56	85	100	(NA)	
	1958... 2.1	59	90	100	(X)	(NA)	
33990	Primary metal products, n.e.c., n.s.k. -----						
	1982... 40.0	(X)	(X)	(X)	(X)	(X)	
	1977... 120.6	(X)	(X)	(X)	(X)	(NA)	
34	FABRICATED METAL PRODUCTS						
3411-	Metal cans -----						
	1982... 10 551.9	50	68	89	98	801	
	1977... 7 414.7	56	71	89	98	(NA)	
	1972... 4 224.4	66	79	91	98	(NA)	
	1967... 2 585.7	70	82	93	99	(NA)	
	1963... 2 002.2	73	84	94	99	(NA)	
	1958... 1481 762.3	80	89	97	99	(NA)	
	1954... 1481 340.6	80	89	96	(NA)	(NA)	
34111	Steel cans and tinware <sup>149</sup> -----						
	1982... 5 643.7	53	72	89	98	890	
34112	Aluminum cans <sup>149</sup> -----						
	1982... 4 878.7	58	83	99 +	100	1 128	
34110	Metal cans, n.s.k. -----						
	1982... 29.5	(X)	(X)	(X)	(X)	(X)	
	1977... 46.2	(X)	(X)	(X)	(X)	(NA)	
	1972... 22.1	(X)	(X)	(X)	(X)	(NA)	
3412-	Metal barrels, drums, and pails (1967 product group 3491-) ---						
	1982... 945.8	37	52	75	95	487	
	1977... 948.2	34	46	68	92	(NA)	
	1972... 509.4	36	47	68	94	(NA)	
	1967... 378.2	37	51	72	93	(NA)	
	1963... 317.9	41	55	74	94	(NA)	
	1958... 259.0	45	58	79	97	(NA)	
34121	Steel pails (1967 product class 34911) -----						
	1982... 207.8	50	77	99 +	100	985	
	1977... 272.9	36	55	87	100	(NA)	
	1972... 153.0	31	51	86	100	(NA)	
	1967... 111.6	33	55	86	100	(NA)	
	1963... 87.2	35	61	90	100	(NA)	
	1958... 80.2	37	64	92	100	(NA)	
	1954... 54.8	43	63	93	(NA)	(NA)	
34122	Steel shipping barrels and drums (more than 12-gallon capacity) (1967 product class 34912) -----						
	1982... 563.2	46	65	88	100	691	
	1977... 548.4	43	59	83	(D)	(NA)	
	1972... 292.1	46	60	86	100	(NA)	
	1967... 212.6	47	63	88	100	(NA)	
	1963... 191.5	52	67	88	100	(NA)	
	1958... 162.4	55	70	91	(D)	(NA)	
	1954... 143.9	56	72	93	(NA)	(NA)	

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
34	FABRICATED METAL PRODUCTS—Con.						
3412-	Metal barrels, drums, and pails (1967 product group 3491-) —Con.						
34123	All other metal barrels (1967 product class 34913) ----- 1982--	139.9	68	87	(D)	100	1 473
	1977--	84.0	65	88	100	(X)	(NA)
	1972--	52.1	54	81	99	100	(NA)
	1967--	45.5	61	78	99	100	(NA)
	1963--	35.9	56	78	96	100	(NA)
	1958--	14.7	50	78	100	(X)	(NA)
34120	Metal barrels, drums, and pails, n.s.k. (1967 product class 34910) --- 1982--	34.9	(X)	(X)	(X)	(X)	(X)
	1977--	43.0	(X)	(X)	(X)	(X)	(NA)
	1972--	12.2	(X)	(X)	(X)	(X)	(NA)
	1967--	8.5	(X)	(X)	(X)	(X)	(NA)
	1963--	3.3	(X)	(X)	(X)	(X)	(NA)
	1958--	1.6	(X)	(X)	(X)	(X)	(NA)
3421-	Cutlery ----- 1982--	953.8	47	58	76	94	995
	1977--	666.9	50	62	79	95	(NA)
	1972--	403.7	52	63	78	94	(NA)
	1967--	308.9	60	70	82	94	(NA)
	1963--	254.3	66	74	83	94	(NA)
	1958--	162.2	54	64	77	91	(NA)
	1954--	153.3	48	57	73	(NA)	(NA)
34211	Cutlery, scissors, shears, trimmers, and snips ----- 1982--	503.5	23	38	67	94	305
	1977--	344.7	28	42	70	97	(NA)
	1972--	183.2	29	44	69	94	(NA)
	1967--	121.0	30	44	71	94	(NA)
	1963--	90.5	29	42	66	90	(NA)
	1958--	77.3	30	41	65	89	(NA)
	1954--	85.4	24	36	60	(NA)	(NA)
34212	Razor blades and razors, except electric ----- 1982--	431.2	(D)	100	(X)	(X)	(D)
	1977--	307.4	99	(D)	100	(X)	(NA)
	1972--	207.2	97	99	100	(X)	(NA)
	1967--	177.1	(D)	(D)	100	(X)	(NA)
	1963--	159.4	(D)	(D)	100	(X)	(NA)
	1958--	80.7	(D)	(D)	100	(X)	(NA)
	1954--	67.8	97	99	100	(X)	(NA)
34210	Cutlery, n.s.k. ----- 1982--	19.1	(X)	(X)	(X)	(X)	(X)
	1977--	14.8	(X)	(X)	(X)	(X)	(NA)
	1972--	13.4	(X)	(X)	(X)	(X)	(NA)
	1967--	10.8	(X)	(X)	(X)	(X)	(NA)
	1963--	4.4	(X)	(X)	(X)	(X)	(NA)
	1958--	4.1	(X)	(X)	(X)	(X)	(NA)
3423-	Hand and edge tools, n.e.c. ----- 1982--	2 598.4	28	39	55	70	283
	1977--	2 066.1	22	34	51	70	(NA)
	1972--	1 110.6	21	35	53	71	(NA)
	1967--	775.1	15	28	48	67	(NA)
	1963--	536.1	17	29	47	65	(NA)
	1958--	434.2	17	29	42	59	(NA)
34231	Mechanics' hand service tools ----- 1982--	1 330.6	39	54	73	88	631
	1977--	1 070.2	31	44	68	88	(NA)
	1972--	597.8	33	44	65	86	(NA)
	1967--	391.5	26	40	63	84	(NA)
	1963--	252.4	27	40	60	80	(NA)
	1958--	188.5	25	35	53	76	(NA)
	1954--	168.8	25	37	57	(NA)	(NA)
34232	Edge tools, hand operated ----- 1982--	470.7	22	35	54	74	229
	1977--	327.6	23	37	61	84	(NA)
	1972--	160.1	33	50	70	89	(NA)
	1967--	127.8	25	37	59	81	(NA)
	1963--	106.2	27	39	61	81	(NA)
	1958--	90.6	20	32	52	72	(NA)
	1954--	73.7	18	32	53	(NA)	(NA)
34233	Other hand tools, n.e.c. ----- 1982--	690.5	43	56	71	88	615
	1977--	524.3	49	64	79	93	(NA)
	1972--	274.7	48	66	80	92	(NA)
	1967--	190.5	41	62	79	93	(NA)
	1963--	156.0	39	57	74	89	(NA)
	1958--	142.0	39	56	72	87	(NA)
34230	Hand and edge tools, n.e.c., n.s.k. ----- 1982--	106.6	(X)	(X)	(X)	(X)	(X)
	1977--	144.0	(X)	(X)	(X)	(X)	(NA)
	1972--	77.9	(X)	(X)	(X)	(X)	(NA)
	1967--	65.3	(X)	(X)	(X)	(X)	(NA)
	1963--	21.4	(X)	(X)	(X)	(X)	(NA)
	1958--	13.1	(X)	(X)	(X)	(X)	(NA)
34250	Hand saws, saw blades, and saw accessories ----- 1982--	440.9	38	55	77	92	511
	1977--	369.3	39	55	79	94	(NA)
	1972--	205.5	38	58	81	95	(NA)
	1967--	138.0	41	58	81	96	(NA)
	1963--	85.0	40	59	85	98	(NA)
	1958--	75.6	43	61	85	97	(NA)
	1954--	64.5	44	60	84	(NA)	(NA)
3429-	Hardware, n.e.c. ----- 1982--	5 676.9	35	41	52	65	702
	1977--	5 082.5	37	43	54	70	(NA)
	1972--	3 095.6	35	42	55	70	(NA)
	1967--	2 188.2	36	43	55	67	(NA)
	1963--	1 622.9	37	43	54	67	(NA)
	1958--	1 224.1	29	35	47	61	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
34	FABRICATED METAL PRODUCTS—Con.						
3429-	Hardware, n.e.c.—Con.						
	1954..	1 053.7	33	40	51	(NA)	(NA)
34292	Furniture hardware, excluding cabinet hardware -----	1982.. 272.0	43	64	89	99 +	680
	1977.. 279.9	40	60	83	98	(NA)	(NA)
	1972.. 205.0	38	54	79	97	(NA)	(NA)
	1967.. 120.9	48	65	82	97	(NA)	(NA)
	1963.. 95.3	45	60	77	93	(NA)	(NA)
	1958.. 77.4	43	61	80	93	(NA)	(NA)
	1954.. 60.2	54	76	89	(NA)	(NA)	(NA)
34293	Vacuum and insulated bottles, jugs, and chests -----	1982.. 120.4	93	(D)	100	(X)	(D)
	1977.. 107.0	96	(D)	100	(X)	(NA)	(NA)
	1972.. 85.4	93	98	100	(X)	(NA)	(NA)
	1967.. 55.9	89	95	100	(X)	(NA)	(NA)
	1963.. 48.0	80	93	100	(X)	(NA)	(NA)
	1958.. 41.1	79	94	100	(X)	(NA)	(NA)
	1954.. 27.9	83	98	100	(X)	(NA)	(NA)
34294	Builders' hardware -----	1982.. 2 057.2	28	41	62	81	324
	1977.. 1 418.9	26	40	62	82	(NA)	(NA)
	1972.. 928.4	29	44	63	82	(NA)	(NA)
	1967.. 593.4	34	45	62	80	(NA)	(NA)
	1963.. 465.8	26	39	58	77	(NA)	(NA)
	1958.. 387.1	24	38	56	75	(NA)	(NA)
	1954.. 323.5	24	36	54	(NA)	(NA)	(NA)
34296	Motor vehicle hardware -----	1982.. 1 999.4	(D)	87	95	99	(D)
	1977.. 2 220.0	(D)	87	95	99	(NA)	(NA)
	1972.. 1 180.3	(D)	89	95	99 +	(NA)	(NA)
34297	Other transportation equipment hardware <sup>11</sup> -----	1982.. 274.2	26	43	69	92	326
	1977.. 155.4	25	40	66	91	(NA)	(NA)
	1972.. 175.6	27	40	63	86	(NA)	(NA)
34298	Other hardware, n.e.c. (1967 product class 34295) -----	1982.. 667.5	14	24	43	71	135
	1977.. 648.5	22	31	49	73	(NA)	(NA)
	1972.. 392.2	23	33	52	74	(NA)	(NA)
	1967.. 335.7	18	28	47	69	(NA)	(NA)
	1963.. 237.2	13	21	39	63	(NA)	(NA)
	1958.. 215.2	15	24	39	62	(NA)	(NA)
	1954.. 191.3	14	24	41	(NA)	(NA)	(NA)
34290	Hardware, n.e.c., n.s.k.-----	1982.. 286.2	(X)	(X)	(X)	(X)	(X)
	1977.. 252.9	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972.. 128.4	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967.. 97.2	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963.. 38.1	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958.. 31.1	(X)	(X)	(X)	(X)	(NA)	(NA)
34310	Metal plumbing fixtures -----	1982.. 455.9	45	63	88	98	720
	1977.. 392.3	50	64	83	97	(NA)	(NA)
	1972.. 311.5	45	62	81	97	(NA)	(NA)
	1967.. 213.1	43	59	80	95	(NA)	(NA)
	1963.. 203.3	46	63	86	97	(NA)	(NA)
	1958.. 180.0	53	70	90	97	(NA)	(NA)
	1954.. 207.2	52	75	91	(NA)	(NA)	(NA)
34320	Plumbing fittings and brass goods -----	1982.. 1 325.3	32	47	71	89	426
	1977.. 1 109.1	30	46	67	88	(NA)	(NA)
	1972.. 676.6	23	39	61	85	(NA)	(NA)
	1967.. 404.6	27	40	62	84	(NA)	(NA)
	1963.. 329.6	27	37	55	77	(NA)	(NA)
	1958.. 259.5	30	41	57	78	(NA)	(NA)
3433-	Heating equipment, except electric <sup>150</sup> -----	1982.. 1 962.3	11	17	32	52	72
	1977.. 1 396.7	12	20	36	58	(NA)	(NA)
	1972.. 904.6	16	25	43	65	(NA)	(NA)
34333	Cast iron heating boilers, radiators, and convectors -----	1982.. 224.1	61	84	99	100	1 488
	1977.. 187.8	50	73	96	100	(NA)	(NA)
	1972.. 156.6	49	69	96	100	(NA)	(NA)
	1967.. 133.4	46	64	90	99 +	(NA)	(NA)
	1963.. 138.9	43	59	84	99	(NA)	(NA)
	1958.. 121.5	47	61	85	(NA)	(NA)	(NA)
34334	Domestic heating stoves -----	1982.. 310.2	30	44	70	87	363
	1977.. 174.7	51	67	91	100	(NA)	(NA)
	1972.. 70.4	48	72	99	100	(NA)	(NA)
	1967.. 50.1	41	64	96	100	(NA)	(NA)
	1963.. 79.1	35	57	85	99 +	(NA)	(NA)
	1958.. 69.8	34	51	79	98	(NA)	(NA)
	1954.. 70.1	30	45	71	(NA)	(NA)	(NA)
34335	Steel heating boilers-----	1982.. 90.9	46	68	94	100	718
	1977.. 73.3	47	72	98	100	(NA)	(NA)
	1972.. 68.7	45	63	88	100	(NA)	(NA)
	1967.. 67.0	44	61	86	100	(NA)	(NA)
	1963.. 70.3	37	53	79	99	(NA)	(NA)
	1958.. 62.8	40	56	79	99	(NA)	(NA)
	1954.. 53.2	33	51	72	(NA)	(NA)	(NA)
34338	Floor and wall furnaces, unit heaters, infrared heaters, and mechanical stokers <sup>151</sup> -----	1982.. 272.1	34	53	80	98	465
34339	Other heating equipment <sup>151</sup> -----	1982.. 888.2	14	23	41	66	119

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
<b>34</b>	<b>FABRICATED METAL PRODUCTS—Con.</b>						
3433- 34330	Heating equipment, except electric <sup>150</sup> —Con. Heating equipment, except electric, n.s.k. -----	1982... 176.7 1977... 170.5 1972... 67.3 1967... 73.6 1963... 41.2 1958... 35.7	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3441-	Fabricated structural metal -----	1982... 7 956.3 1977... 4 860.9 1972... 3 304.4 1967... 2 561.5 1963... 1 604.0 1958... 1 602.1	11 12 11 15 17 22	15 16 15 19 21 26	23 24 23 27 29 34	36 35 35 38 40 46	47 (NA) (NA) (NA) (NA) (NA) (NA)
34411	Fabricated structural metal for buildings -----	1982... 4 588.0 1977... 2 578.5 1972... 1 934.7 1967... 1 430.3 1963... 984.0 1958... 930.4	9 8 11 13 13 19	14 13 17 18 18 23	24 22 27 27 26 33	38 36 42 40 39 46	44 (NA) (NA) (NA) (NA) (NA) (NA)
34412	Fabricated structural metal for bridges -----	1982... 422.8 1977... 280.2 1972... 391.2 1967... 312.2 1963... 224.9 1958... 279.6	30 19 29 32 40 45	47 31 41 42 47 52	70 60 60 60 60 65	91 87 82 80 79 83	421 (NA) (NA) (NA) (NA) (NA) (NA)
34413	Other fabricated structural metal -----	1982... 2 153.6 1977... 1 474.1 1972... 597.6 1967... 550.6 1963... 287.2 1958... 262.0	30 33 19 28 28 31	39 41 28 38 38 40	52 53 44 54 51 56	67 68 65 70 69 74	358 (NA) (NA) (NA) (NA) (NA) (NA)
34410	Fabricated structural metal, n.s.k. -----	1982... 792.0 1977... 528.0 1972... 380.9 1967... 268.4 1963... 107.8 1958... 130.1	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3442-	Metal doors, sash, and trim -----	1982... 4 349.8 1977... 2 974.1 1972... 1 901.3 1967... 1 301.5 1963... 1 106.7 1958... 951.9	9 8 11 9 7 8	14 14 17 14 12 13	27 28 30 24 20 23	43 46 47 39 34 38	50 (NA) (NA) (NA) (NA) (NA) (NA)
34421	Metal doors and frames, except storm doors -----	1982... 1 668.6 1977... 1 089.3 1972... 687.1 1967... 345.7 1963... 289.6 1958... 192.4 1954... 149.8	16 16 16 15 13 16 20	25 26 27 23 20 25 31	38 43 44 40 36 43 47	59 64 65 62 60 63 (NA)	115 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
34422	Metal window sash and frames, except storm sash -----	1982... 1 279.6 1977... 801.9 1972... 511.2 1967... 257.5 1963... 308.8 1958... 285.3 1954... 206.2	14 14 22 22 14 20 26	22 25 32 30 23 33 38	40 42 50 47 40 56 61	62 65 72 67 62 78 (NA)	110 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
34423	Metal molding and trim and store fronts -----	1982... 285.6 1977... 191.1 1972... 146.9 1967... 145.0 1963... 116.8 1958... 97.3 1954... 68.1	34 35 26 41 38 31 32	51 48 42 55 51 44 48	76 72 73 80 72 66 66	94 92 96 97 91 88 (NA)	449 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
34424	Metal combination screen, storm sash, and storm doors -----	1982... 565.6 1977... 401.7 1972... 228.0 1967... 198.2 1963... 221.4 1958... 231.5 1954... 169.8	20 20 24 17 15 11 12	31 31 33 29 23 19 20	51 51 49 48 37 36 36	72 71 68 68 55 52 (NA)	186 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
34425	Metal window and door screens, and weather strip -----	1982... 168.6 1977... 152.4 1972... 95.4 1967... 61.5 1963... 56.7 1958... 64.6	34 38 39 33 23 20	54 53 52 47 34 30	74 71 72 68 54 51	90 88 92 89 77 77	463 (NA) (NA) (NA) (NA) (NA) (NA)
34420	Metal doors, sash, and trim, n.s.k. -----	1982... 381.8 1977... 337.7 1972... 232.6 1967... 293.3 1963... 113.5 1958... 80.6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3443-	Fabricated plate work (boiler shops) -----	1982... 8 094.5 1977... 6 641.2 1972... 3 264.3	18 22 27	24 30 34	33 40 45	47 52 57	130 (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
34	FABRICATED METAL PRODUCTS—Con.						
3443-	Fabricated plate work (boiler shops)—Con.						
	1967..	2 589.4	26	32	44	56	(NA)
	1963..	1 580.8	23	30	43	56	(NA)
	1958..	1 614.0	29	38	50	64	(NA)
34431	Heat exchangers and steam condensers <sup>11</sup> .....	1982.. 1 220.5	19	31	54	78	196
	1977..	900.5	23	37	62	86	(NA)
34432	Fabricated steel plate, stacks, and weldments .....	1982.. 1 656.9	16	25	38	55	111
	1977..	1 095.5	15	23	39	59	(NA)
	1972..	616.0	17	25	38	56	(NA)
	1967..	517.9	24	35	48	62	(NA)
	1963..	374.2	27	38	52	64	(NA)
34433	Steel power boilers, parts, and attachments <sup>11</sup> .....	1982.. 963.1	72	80	92	99	1 970
	1977..	960.3	79	88	95	99+	(NA)
34434	Gas cylinders .....	1982.. 221.5	51	78	99+	100	957
	1977..	173.3	60	82	99	100	(NA)
	1972..	93.4	54	80	99	100	(NA)
	1967..	72.2	59	80	99	100	(NA)
	1963..	46.3	62	79	96	100	(NA)
34435	Complete metal tanks, standard, pressure .....	1982.. 446.7	41	57	78	95	579
	1977..	298.5	28	46	73	94	(NA)
	1972..	174.9	34	47	71	93	(NA)
	1967..	120.2	35	48	69	90	(NA)
	1963..	104.4	22	34	56	81	(NA)
34436	Nuclear reactor steam supply systems <sup>11</sup> .....	1982.. 634.4	71	89	99	100	1 540
	1977..	695.4	71	86	98	100	(NA)
34437	Complete metal tanks, standard, nonpressure .....	1982.. 603.1	19	29	46	71	164
	1977..	486.2	13	22	41	64	(NA)
	1972..	255.0	13	21	37	60	(NA)
	1967..	177.3	14	24	41	61	(NA)
	1963..	145.6	17	25	37	54	(NA)
34438	Metal tanks and vessels, custom made at factory .....	1982.. 1 164.2	24	36	54	74	233
	1977..	770.6	24	36	56	74	(NA)
	1972..	380.3	22	35	53	71	(NA)
	1967..	464.8	33	47	65	80	(NA)
	1963..	197.1	24	37	52	72	(NA)
34439	Metal tanks and vessels, custom made, field erected .....	1982.. 452.4	31	46	73	92	385
	1977..	663.2	48	61	82	96	(NA)
	1972..	369.4	58	72	86	96	(NA)
	1967..	176.1	47	57	73	90	(NA)
	1963..	123.3	71	78	88	97	(NA)
34430	Fabricated platework, boilerships, n.s.k. ....	1982.. 731.6	(X)	(X)	(X)	(X)	(X)
	1977..	597.7	(X)	(X)	(X)	(X)	(NA)
	1972..	199.8	(X)	(X)	(X)	(X)	(NA)
	1967..	195.7	(X)	(X)	(X)	(X)	(NA)
	1963..	88.6	(X)	(X)	(X)	(X)	(NA)
	1958..	70.1	(X)	(X)	(X)	(X)	(NA)
3444-	Sheet metal work .....	1982.. 6 572.6	6	11	18	30	24
	1977..	4 607.5	10	16	26	37	(NA)
	1972..	2 650.0	11	17	26	38	(NA)
	1967..	1 687.1	9	15	22	34	(NA)
	1963..	1 324.7	10	15	23	33	(NA)
	1958..	1 008.5	12	16	24	34	(NA)
	1954..	727.6	17	24	31	(NA)	(NA)
34442	Culverts, flumes, irrigation pipes .....	1982.. 396.3	42	54	72	91	671
	1977..	371.2	42	56	76	92	(NA)
	1972..	241.8	43	56	72	89	(NA)
	1967..	169.9	38	49	70	90	(NA)
	1963..	137.5	43	54	72	89	(NA)
	1958..	126.9	57	66	78	93	(NA)
34444	Metal roofing and roof drainage equipment <sup>11</sup> .....	1982.. 655.5	26	41	62	84	297
	1977..	597.7	25	39	62	84	(NA)
	1972..	422.3	34	46	69	90	(NA)
34445	Metal flooring and siding <sup>11</sup> .....	1982.. 950.7	24	40	70	91	323
	1977..	775.8	36	56	77	94	(NA)
	1972..	301.8	38	58	83	97	(NA)
34446	Other sheet metal work (1967 product class 34443) .....	1982.. 3 466.7	5	9	17	31	24
	1977..	2 121.1	6	11	21	36	(NA)
	1972..	1 187.9	6	10	21	37	(NA)
	1967..	722.9	6	11	23	40	(NA)
	1963..	731.8	5	8	15	28	(NA)
	1958..	485.9	6	10	19	31	(NA)
34440	Sheet metal work, n.s.k. ....	1982.. 1 103.4	(X)	(X)	(X)	(X)	(X)
	1977..	741.4	(X)	(X)	(X)	(X)	(NA)
	1972..	496.2	(X)	(X)	(X)	(X)	(NA)
	1967..	385.7	(X)	(X)	(X)	(X)	(NA)
	1963..	149.2	(X)	(X)	(X)	(X)	(NA)
	1958..	209.9	(X)	(X)	(X)	(X)	(NA)
34460	Architectural and ornamental metal work .....	1982.. 1 422.0	11	19	31	46	65
	1977..	950.9	14	22	36	52	(NA)
	1972..	589.4	11	17	28	42	(NA)
	1967..	504.9	18	27	40	55	(NA)
	1963..	306.2	7	13	24	40	(NA)
	1958..	332.9	8	12	23	37	(NA)

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
34	FABRICATED METAL PRODUCTS—Con.						
3448-	Prefabricated metal buildings <sup>152</sup> -----	1982.. 2 215.1	21	30	49	70	187
	1977.. 1 656.0	22	33	56	76	(NA)	
	1972.. 584.9	32	50	69	86	(NA)	
34481	Prefabricated metal building systems, excluding farm and residential <sup>11</sup> -----	1982.. 1 385.6	29	41	67	88	338
	1977.. 912.2	34	51	75	93	(NA)	
	1972.. 265.0	55	68	90	99	(NA)	
34482	Other prefabricated and portable metal buildings and parts <sup>11</sup> -----	1982.. 709.8	20	35	54	78	212
	1977.. 630.2	29	45	66	87	(NA)	
	1972.. 311.4	34	50	71	89	(NA)	
34480	Prefabricated metal buildings, n.s.k. -----	1982.. 119.8	(X)	(X)	(X)	(X)	(X)
	1977.. 113.6	(X)	(X)	(X)	(X)	(NA)	
	1972.. 8.4	(X)	(X)	(X)	(X)	(NA)	
3449-	Miscellaneous metal work <sup>152</sup> -----	1982.. 2 489.9	23	34	48	66	202
	1977.. 1 332.9	28	44	60	76	(NA)	
	1972.. 992.4	27	38	54	72	(NA)	
34494	Fabricated bar joists and concrete reinforcing bars -----	1982.. 1 231.3	44	56	72	87	604
	1977.. 900.1	40	55	72	86	(NA)	
	1972.. 583.3	45	57	75	91	(NA)	
34496	Metal plaster bases <sup>153</sup> -----	1982.. 167.5	68	87	99	100	1 463
34497	Curtain wall <sup>153</sup> -----	1982.. 395.0	41	63	88	99	702
34498	Custom roll formed products <sup>154</sup> -----	1982.. 599.2	23	33	52	75	245
34490	Miscellaneous metal work, n.s.k. <sup>154</sup> -----	1982.. 96.8	(X)	(X)	(X)	(X)	(X)
3451-	Screw machine products -----	1982.. 2 159.7	8	10	16	26	30
	1977.. 1 771.4	7	10	17	28	(NA)	
	1972.. 1 083.9	5	8	15	26	(NA)	
	1967.. 1 036.1	6	9	16	28	(NA)	
	1963.. 599.5	6	9	16	27	(NA)	
	1958.. 428.8	7	10	18	29	(NA)	
	1954.. 424.8	12	17	25	(NA)	(NA)	
34511	Automotive screw machine products -----	1982.. 686.7	22	30	43	62	240
	1977.. 598.4	20	28	41	61	(NA)	
	1972.. 245.7	20	28	42	63	(NA)	
34512	Other screw machine products -----	1982.. 1 245.3	5	8	15	27	19
	1977.. 958.6	5	9	18	31	(NA)	
	1972.. 638.8	4	8	17	31	(NA)	
34510	Screw machine products, n.s.k. -----	1982.. 227.8	(X)	(X)	(X)	(X)	(X)
	1977.. 214.4	(X)	(X)	(X)	(X)	(NA)	
	1972.. 199.5	(X)	(X)	(X)	(X)	(NA)	
3452-	Bolts, nuts, rivets, and washers -----	1982.. 3 401.0	13	22	37	57	99
	1977.. 3 130.3	13	23	39	61	(NA)	
	1972.. 1 972.3	15	25	42	66	(NA)	
	1967.. 1 613.1	17	26	45	67	(NA)	
	1963.. 1 175.2	17	27	47	67	(NA)	
	1958.. 859.4	17	28	46	66	(NA)	
	1954.. 706.4	16	26	45	(NA)	(NA)	
34524	Externally threaded fasteners, except aircraft <sup>11</sup> -----	1982.. 1 451.0	15	24	44	68	139
	1977.. 1 451.2	15	26	50	75	(NA)	
	1972.. 969.6	19	31	53	77	(NA)	
34525	Internally threaded fasteners, except aircraft <sup>11</sup> -----	1982.. 408.6	24	44	67	89	311
	1977.. 412.6	31	48	76	95	(NA)	
	1972.. 247.9	29	44	72	96	(NA)	
34526	Nonthreaded fasteners, except aircraft <sup>11</sup> -----	1982.. 526.2	20	33	56	80	211
	1977.. 517.2	21	32	57	84	(NA)	
	1972.. 351.8	24	43	67	89	(NA)	
34527	Aircraft aerospace fasteners <sup>11</sup> -----	1982.. 516.7	46	68	91	99+	787
	1977.. 237.9	46	68	91	99+	(NA)	
	1972.. 157.7	49	75	92	99+	(NA)	
34528	Other formed parts, made on fastener machines (1967 product class 34523) -----	1982.. 329.9	24	37	63	89	276
	1977.. 284.6	35	56	79	96	(NA)	
	1972.. 136.3	31	51	72	91	(NA)	
	1967.. 195.9	32	51	72	90	(NA)	
	1963.. 76.7	38	50	71	93	(NA)	
34520	Bolts, nuts, rivets, and washers, n.s.k. -----	1982.. 168.5	(X)	(X)	(X)	(X)	(X)
	1977.. 226.8	(X)	(X)	(X)	(X)	(NA)	
	1972.. 109.0	(X)	(X)	(X)	(X)	(NA)	
	1967.. 71.8	(X)	(X)	(X)	(X)	(NA)	
	1963.. 14.5	(X)	(X)	(X)	(X)	(NA)	
	1958.. 10.5	(X)	(X)	(X)	(X)	(NA)	
3462-	Iron and steel forgings (1967 product group 3391-) -----	1982.. 140 3 161.3	21	30	45	68	177
	1977.. 140 2 966.7	21	32	49	72	(NA)	
	1972.. 140 1 572.6	30	41	57	77	(NA)	
	1967.. 140 1 550.7	26	37	53	73	(NA)	
	1963.. 140 954.9	28	39	55	75	(NA)	

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
34	FABRICATED METAL PRODUCTS—Con.							
3462-	Iron and steel forgings (1967 product group 3391-)—Con.	1958__	140663.2	14	40	61	87	(NA)
34625	Hot impression die impact, press, and upset steel forgings <sup>11</sup> -----	1982__	2 265.5	27	37	55	79	267
		1977__	2 155.4	28	40	59	82	(NA)
34626	Cold impression die impact, press, and upset steel forgings <sup>11</sup> -----	1982__	219.8	54	76	97	100	981
		1977__	215.7	80	94	100	(X)	(NA)
34627	Seamless rolled ring forgings, ferrous, made in plants not producing steel (also see code 3312A) <sup>11</sup> -----	1982__	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1977__	<sup>5</sup> 113.8	52	74	(D)	100	(NA)
34628	Open die or smith forgings, hammer or press, ferrous, made in plants not producing steel (also see code 3312B) <sup>11</sup> -----	1982__	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	(NA)
		1977__	<sup>5</sup> 384.7	36	51	75	97	(NA)
34620	Iron and steel forgings, n.s.k. (1967 product code 33910) -----	1982__	84.1	(X)	(X)	(X)	(X)	(X)
		1977__	97.1	(X)	(X)	(X)	(X)	(NA)
		1972__	39.0	(X)	(X)	(X)	(X)	(NA)
		1967__	39.3	(X)	(X)	(X)	(X)	(NA)
		1963__	16.4	(X)	(X)	(X)	(X)	(NA)
		1958__	12.7	(X)	(X)	(X)	(X)	(NA)
3463-	Nonferrous forgings (1967 product group 3392-) -----	1982__	1 210.9	53	67	85	98	947
		1977__	540.4	61	77	90	99	(NA)
		1972__	280.7	51	69	87	99	(NA)
		1967__	348.1	54	73	89	99	(NA)
		1963__	198.4	56	78	91	99	(NA)
		1958__	132.0	70	82	95	99+	(NA)
		1954__	112.4	63	76	93	(NA)	(NA)
34635	Hot impression die impact, press, and upset nonferrous forgings ---	1982__	1 011.2	58	74	90	99+	1 119
		1977__	468.1	65	82	95	100	(NA)
34639	Other nonferrous forgings <sup>155</sup> -----	1982__	193.7	60	76	95	100	1 080
34630	Nonferrous forgings, n.s.k. -----	1982__	6.0	(X)	(X)	(X)	(X)	(X)
		1977__	11.1	(X)	(X)	(X)	(X)	(NA)
		1972__	5.0	(X)	(X)	(X)	(X)	(NA)
34650	Automotive job stampings (1967 product class 34613) <sup>156</sup> -----	1982__	9 041.2	62	67	74	82	1 488
		1977__	9 599.8	67	71	77	84	(NA)
		1972__	5 150.4	70	73	79	(D)	(NA)
		1967__	3 178.2	69	73	80	87	(NA)
		1963__	<sup>157</sup> 2 548.0	(NA)	(NA)	(NA)	(NA)	(NA)
3466-	Crowns and closures <sup>156</sup> -----	1982__	790.2	51	80	97	100	960
		1977__	581.0	46	68	94	99+	(NA)
		1972__	345.3	48	64	88	99+	(NA)
34661	Metal commercial closures and metal home canning closures, except crowns (1967 product class 34616) -----	1982__	627.1	62	85	99	100	1 214
		1977__	470.7	57	76	95	100	(NA)
		1972__	277.1	56	72	92	100	(NA)
		1967__	204.6	54	73	95	100	(NA)
		1963__	147.9	60	76	97	100	(NA)
		1958__	131.1	58	78	96	100	(NA)
		1954__	94.9	59	77	96	(NA)	(NA)
34662	Metal crowns, (1967 product class 34617) -----	1982__	145.0	(D)	100	(X)	(X)	1 965
		1977__	104.8	90	(D)	100	(X)	(NA)
		1972__	68.2	62	96	100	(X)	(NA)
		1967__	85.4	76	93	100	(X)	(NA)
		1963__	82.0	84	98	100	(X)	(NA)
		1958__	80.8	74	97	100	(X)	(NA)
		1954__	78.4	81	98	100	(X)	(NA)
34660	Crowns and closures, n.s.k. -----	1982__	18.1	(X)	(X)	(X)	(X)	(X)
		1977__	5.6	(X)	(X)	(X)	(X)	(NA)
3469-	Metal stampings, n.e.c. <sup>156</sup> -----	1982__	6 172.9	8	14	23	33	38
		1977__	4 554.5	9	14	23	35	(NA)
		1972__	2 571.1	8	13	21	34	(NA)
34692	Job stampings, except automotiv (1967 product class 34612) -----	1982__	2 908.9	14	19	29	42	82
		1977__	2 199.3	12	16	25	38	(NA)
		1972__	1 274.5	11	17	27	41	(NA)
		1967__	1 076.9	9	15	25	40	(NA)
		1963__	756.7	9	13	22	36	(NA)
		1958__	576.2	8	14	25	41	(NA)
		1954__	510.4	8	14	25	(NA)	(NA)
34694	Stamped and spun cooking utensils, aluminum (1967 product class 34614)-----	1982__	508.2	48	72	93	99+	803
		1977__	330.1	49	71	93	99+	(NA)
		1972__	205.1	56	84	96	99+	(NA)
		1967__	148.2	69	87	96	99+	(NA)
		1963__	95.7	71	88	97	99+	(NA)
		1958__	110.7	79	89	97	99	(NA)
34695	Stamped and spun cooking utensils, except aluminum (1967 product class 34615) -----	1982__	367.7	57	82	93	99	1 153
		1977__	385.4	46	73	92	99	(NA)
		1972__	184.4	51	76	94	99	(NA)
		1967__	141.6	44	66	84	96	(NA)
		1963__	134.3	43	60	82	95	(NA)
		1958__	113.5	48	63	81	95	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
34	FABRICATED METAL PRODUCTS—Con.						
3469-	Metal stampings, n.e.c. <sup>156</sup> —Con.						
34699	Other stamped and pressed metal end products <sup>11</sup> ----- 1982..	1 584.8	14	18	28	46	85
	1977..	1 073.0	21	28	40	57	(NA)
	1972..	573.4	9	15	27	48	(NA)
34690	Metal stampings, n.e.c., n.s.k. ----- 1982..	802.6	(X)	(X)	(X)	(X)	(X)
	1977..	566.7	(X)	(X)	(X)	(X)	(NA)
	1972..	333.7	(X)	(X)	(X)	(X)	(NA)
	1967..	246.1	(X)	(X)	(X)	(X)	(NA)
	1963..	98.1	(X)	(X)	(X)	(X)	(NA)
	1958..	89.0	(X)	(X)	(X)	(X)	(NA)
34710	Electroplating, plating, and polishing ----- 1982..	<sup>1472</sup> 680.3	(NA)	(NA)	(NA)	(NA)	(NA)
	1977..	<sup>1471</sup> 775.1	(NA)	(NA)	(NA)	(NA)	(NA)
	1972..	<sup>1471</sup> 008.9	(NA)	(NA)	(NA)	(NA)	(NA)
	1967..	<sup>1477</sup> 56.1	(NA)	(NA)	(NA)	(NA)	(NA)
	1963..	<sup>1475</sup> 01.9	(NA)	(NA)	(NA)	(NA)	(NA)
	1958..	<sup>1473</sup> 49.7	(NA)	(NA)	(NA)	(NA)	(NA)
34790	Coating, engraving, and allied services ----- 1982..	<sup>1472</sup> 405.2	(NA)	(NA)	(NA)	(NA)	(NA)
	1977..	<sup>1471</sup> 520.5	(NA)	(NA)	(NA)	(NA)	(NA)
	1972..	<sup>1476</sup> 37.1	(NA)	(NA)	(NA)	(NA)	(NA)
	1967..	<sup>1474</sup> 04.3	(NA)	(NA)	(NA)	(NA)	(NA)
	1963..	<sup>1472</sup> 86.5	(NA)	(NA)	(NA)	(NA)	(NA)
	1958..	<sup>1471</sup> 84.0	(NA)	(NA)	(NA)	(NA)	(NA)
34820	Small arms ammunition, 30 mm. or less (1967 product class 19610) <sup>19</sup> ----- 1982..	698.5	70	92	99	99+	1 484
	1977..	403.9	75	91	98	99+	(NA)
	1972..	306.4	88	94	98	99+	(NA)
3483-	Ammunition, except for small arms, n.e.c. (1967 product class 1929-) <sup>19</sup> ----- 1982..	1 359.0	48	66	86	99	921
	1977..	575.9	51	69	88	99+	(NA)
	1972..	991.2	39	57	80	97	(NA)
34831	Artillery ammunition more than 30 mm. (1967 product class 19291) <sup>158</sup> ----- 1982..	678.8	54	74	95	100	909
	1977..	338.3	(NA)	(NA)	(NA)	(NA)	(NA)
	1972..	481.2	(NA)	(NA)	(NA)	(NA)	(NA)
34833	Ammunition, except for small arms, n.e.c. (1967 product class 19293) ----- 1982..	672.2	71	83	98	100	2 379
	1977..	282.9	76	86	90	100	(NA)
	1972..	506.1	54	70	93	100	(NA)
34830	Ammunition, except small arms, n.e.c., n.s.k. (1967 product class 19290) ----- 1982..	6.0	(X)	(X)	(X)	(X)	(D)
	1977..	8.1	(X)	(X)	(X)	(X)	(NA)
	1972..	3.9	(X)	(X)	(X)	(X)	(NA)
3484-	Small arms (1967 product group 1951-) <sup>19</sup> ----- 1982..	896.1	49	74	90	98	831
	1977..	662.6	56	77	94	98	(NA)
	1972..	334.2	54	74	95	99	(NA)
34841	Machine guns, 30 mm. or less (1967 product class 19511) ----- 1982..	<sup>(159)</sup>	<sup>(159)</sup>	<sup>(159)</sup>	<sup>(159)</sup>	<sup>(159)</sup>	(D)
	1977..	<sup>(159)</sup>	<sup>(159)</sup>	<sup>(159)</sup>	<sup>(159)</sup>	<sup>(159)</sup>	(NA)
	1972..	<sup>(159)</sup>	(NA)	(NA)	(NA)	(NA)	(NA)
34842	Small arms, 30 mm. or less (1967 product class 19512) ----- 1982..	<sup>1598</sup> 79.4	50	75	93	99	964
	1977..	<sup>1596</sup> 47.5	(NA)	(NA)	(NA)	(NA)	(NA)
	1972..	<sup>1593</sup> 26.0	(NA)	(NA)	(NA)	(NA)	(NA)
34840	Small arms, n.s.k. (1967 product class 19510) ----- 1982..	16.7	(X)	(X)	(X)	(X)	(X)
	1977..	15.1	(X)	(X)	(X)	(X)	(NA)
	1972..	8.1	(X)	(X)	(X)	(X)	(NA)
3489-	Ordnance and accessories, n.e.c. (1967 product groups 1911- and 1999-) <sup>19</sup> ----- 1982..	1 016.0	48	61	83	97	857
	1977..	483.3	39	57	75	94	(NA)
	1972..	333.8	40	56	78	95	(NA)
34891	Guns, howitzers, mortars, and related equipment, more than 30 mm. (1967 product class 19110) ----- 1982..	138.9	90	96	100	(X)	(D)
	1977..	57.0	78	93	100	(X)	(NA)
	1972..	44.3	93	98	99	100	(NA)
34892	Ordnance and accessories, n.e.c. (1967 product class 19990) ----- 1982..	870.8	47	63	85	98	780
	1977..	414.0	41	58	77	97	(NA)
	1972..	281.3	44	58	81	97	(NA)
34890	Ordnance and accessories, n.e.c., n.s.k. ----- 1982..	6.2	(X)	(X)	(X)	(X)	(X)
	1977..	12.3	(X)	(X)	(X)	(X)	(NA)
	1972..	8.2	(X)	(X)	(X)	(X)	(NA)
3493-	Steel springs, except wire ----- 1982..	511.3	45	63	81	92	829
	1977..	571.0	45	63	83	94	(NA)
	1972..	361.9	39	58	78	94	(NA)
	1967..	264.0	34	50	75	92	(NA)
	1963..	205.2	43	67	85	96	(NA)
	1958..	133.1	44	64	83	95	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
34	FABRICATED METAL PRODUCTS—Con.						
3493-	Steel springs, except wire—Con.						
	1954..	129.6	43	67	86	(NA)	(NA)
34931	Hot formed springs -----	1982.. 395.8	56	72	90	99	1 248
	1977.. 454.2	55	71	93	100	(NA)	(NA)
	1972.. 279.2	49	69	91	(D)	(NA)	(NA)
34932	Cold formed springs -----	1982.. 94.8	60	74	89	99 +	1 770
	1977.. 94.3	64	82	94	100	(NA)	(NA)
	1972.. 56.9	61	75	92	99 +	(NA)	(NA)
34930	Steel springs, except wire, n.s.k. -----	1982.. 20.8	(X)	(X)	(X)	(X)	(X)
	1977.. 22.2	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 25.8	(X)	(X)	(X)	(X)	(X)	(NA)
3494-	Valves and pipe fittings -----	1982.. 8 705.1	12	19	32	51	77
	1977.. 5 403.0	11	18	34	56	(NA)	(NA)
	1972.. 2 879.8	11	20	37	59	(NA)	(NA)
	1967.. 2 102.8	11	21	38	59	(NA)	(NA)
	1963.. 1 525.4	13	22	37	58	(NA)	(NA)
	1958.. 1 193.0	17	24	41	59	(NA)	(NA)
34944	Plumbing and heating valves and specialties -----	1982.. 220.2	37	52	82	99 +	500
	1977.. 206.6	42	60	85	(D)	(NA)	(NA)
	1972.. 139.3	31	46	77	98	(NA)	(NA)
	1967.. 101.2	33	48	71	94	(NA)	(NA)
34945	Metal fittings, flanges, and unions for piping systems -----	1982.. 1 491.2	24	36	59	81	266
	1977.. 1 018.8	26	41	68	89	(NA)	(NA)
	1972.. 599.3	27	46	70	91	(NA)	(NA)
	1967.. 484.7	35	52	77	94	(NA)	(NA)
34947	Automatic regulating and control valves <sup>11</sup> -----	1982.. 1 233.0	31	40	60	82	457
	1977.. 696.1	38	53	73	93	(NA)	(NA)
34948	Solenoid valves <sup>11</sup> -----	1982.. 206.1	58	71	91	100	1 129
	1977.. 114.8	65	82	97	100	(NA)	(NA)
34949	Nuclear valves <sup>160</sup> -----	1982.. 152.0	37	57	90	100	567
3494A	Industrial valves <sup>160</sup> -----	1982.. 3 273.5	16	25	47	74	156
3494B	Hydraulic valves, except aerospace type <sup>161</sup> -----	1982.. 435.3	28	48	79	95	399
3494C	Pneumatic valves, except aerospace type <sup>161</sup> -----	1982.. 339.2	34	51	82	98	500
3494D	Aerospace type hydraulic and pneumatic valves <sup>161</sup> -----	1982.. 262.2	40	59	85	99	674
3494E	Fittings for metal and plastics tubing used in fluid power systems, except aerospace type <sup>162</sup> -----	1982.. 302.7	63	84	98	100	1 368
3494F	Hydraulic and pneumatic hose or tube end fittings and assemblies, except aerospace type <sup>162</sup> -----	1982.. 319.7	56	72	88	99 +	1 026
3494G	Aerospace type hydraulic and pneumatic hose or tube end fittings <sup>162</sup> -----	1982.. 119.0	80	93	99 +	100	2 378
3494H	Parts for fluid power valves <sup>161</sup> -----	1982.. 101.0	42	61	91	100	704
34940	Valves and pipe fittings, n.s.k. -----	1982.. 250.0	(X)	(X)	(X)	(X)	(X)
	1977.. 235.7	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 92.9	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 99.9	(X)	(X)	(X)	(X)	(X)	(NA)
3495-	Wire springs <sup>163</sup> -----	1982.. 1 064.2	27	38	55	73	287
	1977.. 933.0	29	40	57	75	(NA)	(NA)
	1972.. 567.3	26	37	57	78	(NA)	(NA)
34952	Precision mechanical springs (1967 product class 34812) -----	1982.. 480.7	28	38	55	76	283
	1977.. 392.0	26	38	56	79	(NA)	(NA)
	1972.. 250.4	22	35	57	78	(NA)	(NA)
	1967.. 211.0	29	41	61	81	(NA)	(NA)
	1963.. 150.0	35	46	71	91	(NA)	(NA)
	1958.. 109.0	35	46	65	87	(NA)	(NA)
34953	Other wire springs (1967 product class 34813) -----	1982.. 534.8	46	61	79	95	837
	1977.. 500.1	48	61	81	95	(NA)	(NA)
	1972.. 313.1	40	60	84	97	(NA)	(NA)
	1967.. 254.1	36	53	73	90	(NA)	(NA)
	1963.. 239.5	36	54	69	86	(NA)	(NA)
	1958.. 187.8	36	52	69	87	(NA)	(NA)
34950	Wire springs, n.s.k. -----	1982.. 48.7	(X)	(X)	(X)	(X)	(X)
	1977.. 40.9	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 3.6	(X)	(X)	(X)	(X)	(X)	(NA)
3496-	Miscellaneous fabricated wire products <sup>163</sup> -----	1982.. 2 335.1	8	13	24	39	41
	1977.. 1 440.0	9	15	28	45	(NA)	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
34	FABRICATED METAL PRODUCTS—Con.						
3496-	Miscellaneous fabricated wire products <sup>163</sup> —Con.						
	1972..	943.4	8	14	26	42	(NA)
34961	Noninsulated ferrous wire rope, cable, etc., not produced by wiredrawers (1967 product class 34811) (also see code 33151) -----						
	1982..	\$391.4	20	30	50	74	182
	1977..	\$171.4	29	41	66	89	(NA)
	1972..	\$96.4	36	50	73	93	(NA)
	1967..	\$81.8	57	78	96	100	(NA)
	1963..	\$88.6	55	74	94	100	(NA)
	1958..	\$69.3	58	77	97	100	(NA)
34964	Ferrous wire cloth and other woven wire products, not produced by wiredrawers (1967 product class 34814) (also see code 33157) -----						
	1982..	\$204.4	38	54	80	99	562
	1977..	\$137.7	42	60	83	99	(NA)
	1972..	\$75.3	38	53	78	99	(NA)
	1967..	\$51.0	49	64	89	99	(NA)
	1963..	\$48.0	37	54	79	96	(NA)
34965	Nonferrous wire cloth and other woven wire products, not produced by wiredrawers (1967 product class 34815) (also see code 33575) -----						
	1982..	\$81.6	56	77	96	100	1 044
	1977..	\$66.1	48	69	94	100	(NA)
	1972..	\$49.6	54	76	93	100	(NA)
	1967..	\$53.8	50	68	92	100	(NA)
	1963..	\$48.8	45	65	90	99 +	(NA)
34966	Fence and fence gates, not produced by wiredrawers (1967 product class 34816) (also see code 33156) -----						
	1982..	\$145.1	39	54	78	98	659
	1977..	\$131.3	62	73	91	99 +	(NA)
	1972..	\$73.5	61	75	90	99 +	(NA)
	1967..	\$51.2	54	68	80	98	(NA)
	1963..	\$57.2	56	65	83	96	(NA)
	1958..	\$55.3	52	62	78	93	(NA)
34967	Steel nails and spikes, not made by wiredrawers (also see code 33152) <sup>11</sup> -----						
	1982..	206.6	59	78	93	100	1 143
	1977..	88.1	84	94	100	(X)	(NA)
34968	Other fabricated wire products, not produced by wiredrawers (also see code 33159) <sup>11</sup> -----						
	1982..	1 089.6	13	21	36	56	95
	1977..	626.0	16	25	42	63	(NA)
34960	Miscellaneous fabricated wire products, n.s.k. (1967 product class 34810) -----						
	1982..	216.5	(X)	(X)	(X)	(X)	(X)
	1977..	219.5	(X)	(X)	(X)	(X)	(NA)
	1972..	191.2	(X)	(X)	(X)	(X)	(NA)
	1967..	143.9	(X)	(X)	(X)	(X)	(NA)
	1963..	60.0	(X)	(X)	(X)	(X)	(NA)
	1958..	38.1	(X)	(X)	(X)	(X)	(NA)
3497-	Metal foil and leaf -----						
	1982..	1 758.0	43	56	75	92	941
	1977..	1 089.5	43	58	78	95	(NA)
	1972..	497.2	41	57	78	96	(NA)
	1967..	385.6	42	58	78	95	(NA)
	1963..	308.7	50	67	85	87	(NA)
	1958..	145.5	42	59	80	95	(NA)
34971	Converted unmounted aluminum foil packaging products -----						
	1982..	654.5	85	94	99 +	100	(D)
	1977..	386.7	81	93	100	(X)	(NA)
	1972..	194.1	81	95	100	(X)	(NA)
34972	Laminated aluminum foil flexible packaging -----						
	1982..	775.5	41	56	80	97	606
	1977..	496.9	41	57	84	99	(NA)
	1972..	218.8	33	53	83	99	(NA)
34973	Converted foil for nonpackaging applications -----						
	1982..	324.4	45	62	88	100	739
	1977..	184.3	45	67	95	100	(NA)
	1972..	61.2	55	81	100	(X)	(NA)
34970	Metal leaf and foil, n.s.k. -----						
	1982..	3.6	(X)	(X)	(X)	(X)	(X)
	1977..	21.6	(X)	(X)	(X)	(X)	(NA)
	1972..	23.0	(X)	(X)	(X)	(X)	(NA)
34980	Fabricated pipe and pipe fittings -----						
	1982..	3 035.3	13	23	42	63	115
	1977..	1 698.1	16	27	46	65	(NA)
	1972..	670.4	19	30	50	70	(NA)
	1967..	486.3	15	25	44	67	(NA)
	1963..	286.5	14	26	44	66	(NA)
	1958..	265.4	19	30	49	70	(NA)
	1954..	214.1	21	33	53	(NA)	(NA)
3499-	Fabricated metal products, n.e.c. <sup>164</sup> -----						
	1982..	4 210.9	8	13	22	34	36
	1977..	3 390.3	12	17	26	38	(NA)
	1972..	2 149.8	16	24	34	46	(NA)
34991	Safes and vaults (1967 product class 34920) -----						
	1982..	282.6	68	80	95	100	1 537
	1977..	181.6	74	86	98	100	(NA)
	1972..	147.2	89	95	99	(X)	(NA)
	1967..	79.5	(D)	92	99	100	(NA)
	1963..	59.3	(D)	91	98	100	(NA)
	1958..	45.1	87	92	99	100	(NA)
	1954..	34.0	86	93	99	(NA)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
34	FABRICATED METAL PRODUCTS—Con.						
3499-	Fabricated metal products, n.e.c. <sup>164</sup> —Con.						
34992	Collapsible tubes (1967 product class 34960) -----	1982.. 84.7	65	84	99+	100	1 396
		1977.. 106.5	64	87	100	(X)	(NA)
		1972.. 49.3	70	96	100	(X)	(NA)
		1967.. 50.9	57	91	100	(X)	(NA)
		1963.. 44.2	55	90	100	(X)	(NA)
		1958.. 37.2	53	85	100	(X)	(NA)
		1954.. 34.1	50	82	100	(X)	(NA)
34993	Flat metal strapping -----	1982.. 271.6	87	99	100	(X)	2 934
		1977.. 272.6	92	97	99	100	(NA)
		1972.. 167.8	85	97	99+	100	(NA)
34995	Metal ladders <sup>165</sup> -----	1982.. 152.0	58	71	85	98	1 020
34996	Powder metallurgy parts <sup>165</sup> -----	1982.. 441.3	21	33	53	81	209
34998	All other fabricated metal products, n.e.c. <sup>165</sup> -----	1982.. 2 277.1	9	14	23	38	41
34990	Fabricated metal products, n.e.c., n.s.k. <sup>11</sup> -----	1982.. 701.5	(X)	(X)	(X)	(X)	(X)
		1977.. 529.7	(X)	(X)	(X)	(X)	(NA)
		1972.. 382.6	(X)	(X)	(X)	(X)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL						
3511-	Turbines and turbine generator sets -----	1982.. 3 662.3	83	89	96	99	2 855
		1977.. 2 813.1	80	88	98	99+	(NA)
		1972.. 2 079.7	(D)	93	98	100	(NA)
		1967.. 1 059.3	78	91	99	99+	(NA)
		1963.. 589.1	83	92	99	100	(NA)
		1958.. 754.0	86	94	99	100	(NA)
35111	Steam, gas, and hydraulic turbine generator sets -----	1982.. 786.5	(D)	95	99	100	(X)
		1977.. 1 369.2	(D)	98	100	100	(NA)
		1972.. 1 521.6	(D)	(D)	100	100	(NA)
		1967.. 714.5	95	99	100	(X)	(NA)
		1963.. (D)	(D)	(D)	100	(X)	(NA)
		1958.. 489.5	99	(D)	100	(X)	(NA)
		1954.. 317.3	97	100	(X)	(X)	(NA)
35112	Steam, gas, and hydraulic turbines and parts-----	1982.. 2 846.9	85	91	98	100	2 733
		1977.. 1 415.4	74	86	99	100	(NA)
		1972.. 541.5	73	87	98	100	(NA)
		1967.. 344.7	63	81	98	100	(NA)
		1963.. (D)	(D)	(D)	100	100	(NA)
		1958.. 264.5	65	83	98	100	(NA)
35110	Turbines and turbine generator sets, n.s.k.-----	1982.. 28.9	(X)	(X)	(X)	(X)	(X)
		1977.. 28.5	(X)	(X)	(X)	(X)	(NA)
		1972.. 28.9	(X)	(X)	(X)	(X)	(NA)
3519-	Internal combustion engines, n.e.c.-----	1982.. 8 972.4	49	66	86	96	804
		1977.. 7 548.0	51	70	88	97	(NA)
		1972.. 3 353.4	48	69	89	97	(NA)
		1967.. 2 187.6	45	64	86	98	(NA)
		1963.. 1 423.9	46	66	86	98	(NA)
		1958.. 1 132.0	45	63	86	98	(NA)
35191	Gasoline and gas-gasoline engines <sup>166</sup> -----	1982.. 1 001.8	78	94	99+	100	(X)
		1977.. 892.9	72	92	99+	100	(NA)
35193	Diesel, semidiesel, and dual fuel engines, nonautomotive-----	1982.. 1 548.2	81	94	100	(X)	(X)
		1977.. 1 587.4	80	94	99+	100	(NA)
		1972.. 604.0	80	89	100	100	(NA)
		1967.. 447.9	81	94	100	(X)	(NA)
35194	Diesel, semidiesel, and dual fuel engines, automotive-----	1982.. 1 715.6	90	(D)	(X)	(X)	2 806
		1977.. 1 322.2	93	100	100	100	(NA)
		1972.. 634.6	96	99+	100	(X)	(NA)
		1967.. 233.2	97	100	(X)	(X)	(NA)
35196	Gas engines, except gas turbines-----	1982.. 99.6	88	99	(D)	(X)	(D)
		1977.. 31.9	95	(D)	(D)	(X)	(NA)
		1972.. 35.2	77	94	100	(X)	(NA)
		1967.. 22.6	91	99+	100	(X)	(NA)
		1963.. 22.1	62	94	100	(X)	(NA)
		1958.. 17.7	68	94	100	(X)	(NA)
35197	Outboard motors and tank and converted internal combustion engines-----	1982.. 1 143.4	72	89	98	100	1 645
		1977.. 813.7	83	96	(D)	100	(NA)
		1972.. 425.9	85	97	100	100	(NA)
		1967.. 267.1	74	89	100	(X)	(NA)
35199	Parts for internal combustion engines-----	1982.. 3 405.7	44	64	82	95	687
		1977.. 2 846.9	52	69	85	98	(NA)
		1972.. 1 144.9	51	65	85	98	(NA)
		1967.. 816.0	45	64	85	99	(NA)
		1963.. 480.6	45	59	83	98	(NA)
		1958.. 379.4	47	63	86	98	(NA)
		1954.. 289.9	39	63	82	(NA)	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3519-	Internal combustion engines, n.e.c.—Con.						
35190	Internal combustion engines, n.s.k. .... 1982 .....	58.2	(X)	(X)	(X)	(X)	(X)
	..... 1977 .....	52.9	(X)	(X)	(X)	(X)	(NA)
	..... 1972 .....	18.0	(X)	(X)	(X)	(X)	(NA)
	..... 1967 .....	13.9	(X)	(X)	(X)	(X)	(NA)
	..... 1963 .....	2.9	(X)	(X)	(X)	(X)	(NA)
	..... 1958 .....	1.3	(X)	(X)	(X)	(X)	(NA)
3523-	Farm machinery and equipment <sup>167</sup> ..... 1982 .....	10 370.0	54	61	68	75	1 464
	..... 1977 .....	9 548.9	46	60	68	76	(NA)
	..... 1972 .....	4 143.5	46	59	67	75	(NA)
35231	Wheel tractors and attachments (1967 product class 35221)..... 1982 .....	2 321.9	82	99	100	(D)	2 825
	..... 1977 .....	2 637.0	80	99	(D)	(D)	(NA)
	..... 1972 .....	1 215.2	81	98	100	(X)	(NA)
	..... 1967 .....	1 040.2	75	98	99+	100	(NA)
	..... 1963 .....	808.4	72	95	98	99+	(NA)
	..... 1958 .....	687.1	72	96	99	99+	(NA)
35232	Dairy equipment, sprayers, elevators, and blowers <sup>167</sup> ..... 1982 .....	382.2	28	46	69	87	345
	..... 1977 .....	306.4	34	50	72	93	(NA)
	..... <sup>11</sup> 1972 .....	157.8	27	39	60	86	(NA)
35233	Planting, seeding, and fertilizing machinery (1967 product class 35223)..... 1982 .....	566.5	58	67	80	94	2 049
	..... 1977 .....	466.5	50	60	79	94	(NA)
	..... 1972 .....	172.0	43	56	76	93	(NA)
	..... 1967 .....	183.0	48	58	74	90	(NA)
	..... 1963 .....	115.7	48	61	80	93	(NA)
	..... 1958 .....	96.0	63	76	89	97	(NA)
	..... 1954 .....	93.6	52	66	80	(NA)	(NA)
35234	Harrows, rollers, pulverizers, stalk cutters <sup>167</sup> ..... 1982 .....	298.7	39	53	73	94	523
	..... 1977 .....	392.2	36	52	75	94	(NA)
	..... <sup>11</sup> 1972 .....	191.8	36	51	74	92	(NA)
35235	Harvesting machinery, except for hay and straw (1967 product class 35225)..... 1982 .....	1 854.1	88	91	96	99	(D)
	..... 1977 .....	1 463.3	79	87	94	99	(NA)
	..... 1972 .....	580.4	71	81	92	98	(NA)
	..... 1967 .....	580.7	67	82	91	98	(NA)
	..... 1963 .....	395.3	69	80	91	98	(NA)
	..... 1958 .....	321.4	70	81	92	98	(NA)
	..... 1954 .....	252.6	66	82	94	(NA)	(NA)
35236	Haying machinery (1967 product class 35226)..... 1982 .....	444.8	87	94	99	100	2 530
	..... 1977 .....	414.9	81	93	98	100	(NA)
	..... 1972 .....	184.1	82	89	97	100	(NA)
	..... 1967 .....	148.8	78	88	98	100	(NA)
	..... 1963 .....	133.8	74	86	96	99	(NA)
	..... 1958 .....	182.5	72	84	97	99	(NA)
	..... 1954 .....	147.9	73	87	96	(NA)	(NA)
35237	Plows and listers <sup>167</sup> ..... 1982 .....	125.9	60	74	90	99	1 716
	..... 1977 .....	199.0	69	78	92	99	(NA)
	..... <sup>11</sup> 1972 .....	85.4	70	81	93	100	(NA)
35238	All other farm machinery and equipment (1967 product class 35228)..... 1982 .....	1 156.3	19	28	43	64	157
	..... 1977 .....	1 228.0	19	28	45	66	(NA)
	..... 1972 .....	610.8	15	24	39	60	(NA)
	..... 1967 .....	403.9	18	28	46	68	(NA)
35239	Parts for farm machinery <sup>167</sup> ..... 1982 .....	2 327.6	63	70	78	87	2 260
	..... 1977 .....	1 609.5	50	63	74	85	(NA)
	..... <sup>11</sup> 1972 .....	741.4	51	63	76	89	(NA)
3523A	Commercial turf and grounds mowing equipment <sup>11</sup> ..... 1982 .....	203.0	64	78	95	100	1 352
	..... 1977 .....	107.4	67	84	98	100	(NA)
3523B	Other commercial turf and grounds care equipment <sup>11</sup> ..... 1982 .....	35.2	75	91	100	(X)	2 338
	..... 1977 .....	172.9	(D)	91	98	100	(NA)
35230	Farm machinery and equipment, n.s.k. <sup>11</sup> ..... 1982 .....	653.7	(X)	(X)	(X)	(X)	(X)
	..... 1977 .....	551.8	(X)	(X)	(X)	(X)	(NA)
	..... 1972 .....	204.6	(X)	(X)	(X)	(X)	(NA)
3524-	Lawn and garden equipment <sup>167</sup> ..... 1982 .....	2 385.2	37	55	84	96	523
	..... 1977 .....	1 747.2	28	48	78	94	(NA)
	..... 1972 .....	1 143.4	28	45	72	92	(NA)
35241	Consumer nonriding lawn and garden equipment <sup>11</sup> ..... 1982 .....	1 167.5	38	60	89	99+	604
	..... 1977 .....	841.2	36	56	87	98	(NA)
35243	Parts for consumer nonriding lawn and garden quipment <sup>11</sup> ..... 1982 .....	148.4	38	64	93	100	646
	..... 1977 .....	103.2	50	70	90	99+	(NA)
35244	Consumer riding lawn and garden equipment <sup>11</sup> ..... 1982 .....	765.2	58	84	100	(D)	1 190
	..... 1977 .....	577.4	43	70	98	100	(NA)
35245	Parts for consumer riding lawn and garden equipment <sup>11</sup> ..... 1982 .....	250.9	51	69	94	100	995
	..... 1977 .....	199.3	45	65	88	(D)	(NA)
35240	Lawn and garden equipment, n.s.k. <sup>167</sup> ..... 1982 .....	53.3	(X)	(X)	(X)	(X)	(X)
	..... 1977 .....	26.1	(X)	(X)	(X)	(X)	(NA)
	..... 1972 .....	2.5	(X)	(X)	(X)	(X)	(NA)
3531-	Construction machinery <sup>6</sup> ..... 1982 .....	10 648.3	44	54	68	80	961
	..... 1977 .....	11 569.9	47	58	74	84	(NA)
	..... 1972 .....	5 653.6	41	53	70	84	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3531-	Construction machinery <sup>6</sup> —Con.						
	1967... 3 766.6	40	50	70	83	(NA)	
	1963... 2 624.2	42	53	69	82	(NA)	
	1958... 1 996.3	41	52	67	81	(NA)	
35311	Contractors' off-highway wheel tractors -----	1982... 266.8	73	87	100	(D)	2 716
	1977... 453.6	75	88	99+	100	(NA)	(NA)
	1972... 251.5	76	94	100	(X)	(NA)	(NA)
	1967... 132.2	72	95	100	(X)	(NA)	(NA)
	1963... 102.7	76	95	100	(X)	(NA)	(NA)
	1958... 90.0	82	97	99	100	(NA)	(NA)
	1954... 46.8	85	99	100	(X)	(NA)	(NA)
35312	Tracklaying type tractors -----	1982... 804.8	93	100	(X)	(X)	(D)
	1977... 1 164.6	88	98	100	(X)	(NA)	(NA)
	1972... 564.0	91	99	100	(X)	(NA)	(NA)
	1967... 389.9	93	99+	100	(X)	(NA)	(NA)
	1963... 317.4	94	(D)	100	(X)	(NA)	(NA)
	1958... 287.3	92	99	100	(X)	(NA)	(NA)
	1954... 267.9	97	(D)	100	(X)	(NA)	(NA)
35313	Parts for tractors and tractor shovel loaders -----	1982... 1 721.0	(D)	88	95	99+	(D)
	1977... 1 818.0	76	88	96	99+	(NA)	(NA)
	1972... 865.7	70	85	95	100	(NA)	(NA)
	1967... 604.2	72	84	96	99+	(NA)	(NA)
35314	Power cranes, draglines, shovels -----	1982... 1 940.3	48	73	91	99	795
	1977... 2 260.5	43	70	96	99+	(NA)	(NA)
	1972... 914.2	43	72	90	98	(NA)	(NA)
	1967... 656.5	45	71	92	99	(NA)	(NA)
	1963... 464.8	44	69	92	99	(NA)	(NA)
	1958... 361.1	40	62	89	99	(NA)	(NA)
	1954... 268.7	44	70	93	(NA)	(NA)	(NA)
35316	Mixers, pavers, and related equipment-----	1982... 307.0	38	51	75	97	562
	1977... 304.8	36	56	80	98	(NA)	(NA)
	1972... 252.0	39	56	77	96	(NA)	(NA)
	1967... 162.3	40	56	78	95	(NA)	(NA)
	1963... 132.0	37	53	75	93	(NA)	(NA)
	1958... 101.9	31	48	73	94	(NA)	(NA)
	1954... 71.0	34	53	78	(NA)	(NA)	(NA)
35317	Tractor shovel loaders -----	1982... 1 248.4	77	90	99+	100	1 885
	1977... 1 537.2	74	91	99+	100	(NA)	(NA)
	1972... 810.7	75	91	(D)	(D)	(NA)	(NA)
	1967... 411.6	76	94	100	(X)	(NA)	(NA)
35318	Scrapers, graders, rollers, and off-highway trucks -----	1982... 1 365.5	61	77	92	99	1 637
	1977... 1 723.8	58	73	89	99	(NA)	(NA)
	1972... 964.8	48	60	82	97	(NA)	(NA)
	1967... 711.4	48	64	87	98	(NA)	(NA)
	1963... 480.0	45	63	86	97	(NA)	(NA)
	1958... 326.0	48	66	84	96	(NA)	(NA)
35319	Construction machinery, n.e.c. -----	1982... 2 677.9	22	31	48	71	238
	1977... 2 002.2	30	38	53	72	(NA)	(NA)
	1972... 913.0	22	35	53	72	(NA)	(NA)
	1967... 613.9	21	30	46	70	(NA)	(NA)
	1963... 403.5	13	21	36	62	(NA)	(NA)
	1958... 368.1	17	30	50	73	(NA)	(NA)
35310	Construction machinery, n.s.k. -----	1982... 316.6	(X)	(X)	(X)	(X)	(X)
	1977... 305.1	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972... 117.7	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967... 84.5	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963... 33.2	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958... 32.0	(X)	(X)	(X)	(X)	(NA)	(NA)
3532-	Mining machinery -----	1982... 1 936.3	36	47	65	83	562
	1977... 1 785.6	37	48	66	83	(NA)	(NA)
	1972... 729.8	36	48	63	80	(NA)	(NA)
	1967... 521.5	30	42	60	80	(NA)	(NA)
	1963... 336.2	28	40	59	81	(NA)	(NA)
	1958... 275.3	26	37	56	78	(NA)	(NA)
35325	Underground mining machinery <sup>11</sup> -----	1982... 448.6	68	84	96	100	1 815
	1977... 432.1	64	81	95	(D)	(NA)	(NA)
35326	Mineral beneficiation machinery <sup>11</sup> -----	1982... 91.3	41	60	88	100	598
	1977... 100.9	47	68	97	100	(NA)	(NA)
35327	Crushing, pulverizing, and screening machinery -----	1982... 182.4	44	60	87	100	713
	1977... 181.9	41	62	89	100	(NA)	(NA)
	1972... 101.3	46	61	83	100	(NA)	(NA)
	1967... 78.5	38	55	83	99+	(NA)	(NA)
	1963... 58.0	48	64	87	99+	(NA)	(NA)
	1958... 67.8	31	51	80	98	(NA)	(NA)
35328	Drills and other mining machinery, n.e.c. -----	1982... 129.9	60	78	98	100	1 117
	1977... 120.5	60	78	96	100	(NA)	(NA)
	1972... 93.5	65	76	91	100	(NA)	(NA)
	1967... 50.1	40	65	92	100	(NA)	(NA)
	1963... 39.3	54	72	90	(D)	(NA)	(NA)
35329	Parts and attachments for mining machinery -----	1982... 983.8	36	49	70	89	559
	1977... 841.4	39	53	74	93	(NA)	(NA)
	1972... 331.1	39	56	74	93	(NA)	(NA)
	1967... 257.2	37	53	75	94	(NA)	(NA)
	1963... 158.0	33	47	70	91	(NA)	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3532- 35320	Mining machinery—Con. Mining machinery, n.s.k. ----- 1982..	100.4	(X)	(X)	(X)	(X)	(X)
	1977..	108.8	(X)	(X)	(X)	(X)	(NA)
	1972..	35.4	(X)	(X)	(X)	(X)	(NA)
	1967..	34.3	(X)	(X)	(X)	(X)	(NA)
	1963..	7.3	(X)	(X)	(X)	(X)	(NA)
3533-	Oil field machinery ----- 1982..	9 514.1	28	43	63	79	304
	1977..	3 219.4	30	43	63	84	(NA)
	1972..	980.0	26	40	59	85	(NA)
	1967..	660.7	24	38	57	80	(NA)
	1963..	572.7	27	39	58	78	(NA)
	1958..	496.1	30	42	60	80	(NA)
	1954..	468.7	35	46	63	(NA)	(NA)
35331	Rotary drilling equipment ----- 1982..	3 803.6	46	62	84	97	675
	1977..	1 221.4	53	69	87	99	(NA)
	1972..	348.2	56	70	89	100	(NA)
	1967..	243.5	50	64	84	97	(NA)
	1963..	217.2	54	65	83	97	(NA)
	1958..	222.0	59	71	87	98	(NA)
35332	Other drilling equipment ----- 1982..	832.4	52	68	84	97	973
	1977..	208.3	44	62	89	100	(NA)
	1972..	87.0	50	74	95	100	(NA)
	1967..	43.5	42	63	88	100	(NA)
	1963..	38.8	45	64	91	(D)	(NA)
	1958..	43.4	62	80	96	100	(NA)
35333	Oil field and gas field production machinery <sup>168</sup> ----- 1982..	3 035.2	39	54	72	88	510
	1977..	1 110.5	43	59	78	95	(NA)
	1972..	376.5	40	54	78	96	(NA)
	1967..	260.5	35	50	79	97	(NA)
	1963..	261.5	30	42	66	87	(NA)
	1958..	175.5	26	41	68	92	(NA)
35335	Portable drilling rigs <sup>168</sup> ----- 1982..	532.3	48	67	89	99 +	725
35336	Derricks and well surveying machinery <sup>168</sup> ----- 1982..	737.2	52	68	89	99 +	1 036
35330	Oil field machinery, n.s.k. ----- 1982..	573.4	(X)	(X)	(X)	(X)	(X)
	1977..	158.6	(X)	(X)	(X)	(X)	(NA)
	1972..	54.7	(X)	(X)	(X)	(X)	(NA)
	1967..	47.9	(X)	(X)	(X)	(X)	(NA)
	1963..	11.9	(X)	(X)	(X)	(X)	(NA)
	1958..	14.6	(X)	(X)	(X)	(X)	(NA)
3534-	Elevators and moving stairways ----- 1982..	1 019.7	51	65	79	91	777
	1977..	435.1	51	64	77	91	(NA)
	1972..	412.2	52	66	80	92	(NA)
	1967..	295.9	58	68	80	94	(NA)
	1963..	248.2	55	67	81	93	(NA)
	1958..	165.3	57	65	78	91	(NA)
	1954..	128.1	56	65	77	(NA)	(NA)
35341	Elevators and moving stairways <sup>169</sup> ----- 1982..	747.3	64	81	90	99 +	1 207
35342	Parts for elevators and moving stairways <sup>169</sup> ----- 1982..	187.4	40	67	94	100	675
35340	Elevators and moving stairways, n.s.k. <sup>168</sup> ----- 1982..	84.9	(X)	(X)	(X)	(X)	(X)
3535-	Conveyors and conveying equipment ----- 1982..	2 570.7	13	22	36	52	90
	1977..	1 684.6	15	24	39	58	(NA)
	1972..	825.6	19	28	44	63	(NA)
	1967..	655.4	24	34	50	67	(NA)
	1963..	414.9	23	33	51	69	(NA)
	1958..	333.9	25	34	51	70	(NA)
35353	Unit handling conveyors <sup>11</sup> ----- 1982..	994.2	24	37	57	77	240
	1977..	586.5	21	35	56	80	(NA)
35354	Parts for unit handling conveyors <sup>11</sup> ----- 1982..	107.4	26	42	66	92	314
	1977..	73.1	35	57	85	99 +	(NA)
35355	Bulk material handling conveyors <sup>11</sup> ----- 1982..	953.4	16	25	42	64	138
	1977..	640.2	22	34	56	77	(NA)
35356	Parts for bulk material handling conveyors <sup>11</sup> ----- 1982..	294.7	27	46	72	92	357
	1977..	204.4	30	52	83	98	(NA)
35350	Conveyors and conveying equipment, n.s.k. ----- 1982..	221.0	(X)	(X)	(X)	(X)	(X)
	1977..	180.4	(X)	(X)	(X)	(X)	(NA)
	1972..	59.7	(X)	(X)	(X)	(X)	(NA)
	1967..	57.9	(X)	(X)	(X)	(X)	(NA)
	1963..	20.7	(X)	(X)	(X)	(X)	(NA)
	1958..	13.9	(X)	(X)	(X)	(X)	(NA)
3536-	Holsts, cranes, and monoralls ----- 1982..	1 086.9	23	33	52	70	274
	1977..	901.3	21	32	54	75	(NA)
	1972..	446.0	22	34	58	80	(NA)
	1967..	385.3	31	45	65	85	(NA)
	1963..	224.2	27	40	66	87	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3536-	Hoists, cranes, and monorails—Con.						
	1958..	165.5	33	50	72	91	(NA)
35361	Hoists.....	1982.. 434.5	23	40	63	86	270
	1977.. 404.1	23	41	65	89	(NA)	
	1972.. 167.4	28	46	71	91	(NA)	
	1967.. 144.9	28	46	73	93	(NA)	
	1963.. 105.0	24	43	71	91	(NA)	
	1958.. 59.4	28	46	73	93	(NA)	
35362	Overhead traveling cranes and monorails <sup>170</sup> .....	1982.. 562.6	37	52	71	90	633
	1977.. 426.8	38	52	75	94	(NA)	
	1972.. 253.5	33	50	75	94	(NA)	
	1967.. 215.1	47	67	86	99	(NA)	
	1963.. 115.7	43	65	89	99 +	(NA)	
	1958.. 106.1	46	71	90	99	(NA)	
	1954.. 104.0	47	67	87	(NA)	(NA)	
35360	Hoists, cranes, and monorails, n.s.k. ....	1982.. 89.8	(X)	(X)	(X)	(X)	(X)
	1977.. 70.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 25.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 25.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 3.5	(X)	(X)	(X)	(X)	(X)	(NA)
3537-	Industrial trucks and tractors <sup>170</sup> .....	1982.. 1 917.3	33	47	62	75	365
	1977.. 1 799.9	46	59	72	81	(NA)	
	1972.. 1 004.8	46	61	73	83	(NA)	
35371	Industrial trucks and tractors <sup>11</sup> .....	1982.. 1 353.9	37	54	72	86	484
	1977.. 1 233.8	54	69	82	93	(NA)	
	1972.. 729.5	52	69	81	93	(NA)	
35372	Parts for industrial trucks and tractors <sup>11</sup> .....	1982.. 399.8	38	53	73	91	487
	1977.. 378.2	42	64	81	96	(NA)	
	1972.. 171.4	56	75	92	100	(NA)	
35370	Industrial trucks and tractors, n.s.k. <sup>11</sup> .....	1982.. 163.8	(X)	(X)	(X)	(X)	(X)
	1977.. 187.9	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 103.9	(X)	(X)	(X)	(X)	(X)	(NA)
3541-	Machine tools, metal cutting types .....	1982.. 4 154.7	30	44	63	77	337
	1977.. 2 560.5	21	34	54	73	(NA)	
	1972.. 1 258.5	20	31	52	71	(NA)	
	1967.. 1 907.8	21	32	51	73	(NA)	
	1963.. 925.3	21	30	49	69	(NA)	
	1958.. 592.5	20	29	48	69	(NA)	
	1954.. 1 002.0	18	27	49	(NA)	(NA)	
35411	Boring machines .....	1982.. 198.7	61	83	98	100	1 241
	1977.. 93.5	50	72	94	100	(NA)	
	1972.. 58.7	43	66	87	98	(NA)	
	1967.. 127.8	52	68	90	98	(NA)	
	1963.. 66.3	56	76	94	99	(NA)	
	1958.. 52.8	45	72	95	100	(NA)	
	1954.. 114.4	51	73	92	(NA)	(NA)	
35412	Drilling machines .....	1982.. 67.3	28	45	77	99 +	415
	1977.. 108.9	45	58	79	98	(NA)	
	1972.. 73.7	33	48	71	94	(NA)	
	1967.. 128.5	42	57	80	96	(NA)	
	1963.. 55.3	30	45	69	94	(NA)	
	1958.. 30.9	43	58	82	98	(NA)	
	1954.. 86.1	36	56	87	(NA)	(NA)	
35413	Gear cutting machines .....	1982.. 87.3	86	99	100	(X)	2 649
	1977.. 67.1	79	92	(D)	100	(NA)	
	1972.. 56.7	(D)	94	99	100	(NA)	
	1967.. 67.1	80	95	100	(X)	(NA)	
	1963.. 40.9	83	95	99 +	100	(NA)	
	1958.. 23.5	77	94	(D)	100	(NA)	
	1954.. 48.1	69	90	99	(NA)	(NA)	
35414	Grinding, polishing, honing, and lapping machines .....	1982.. 515.3	55	67	82	96	998
	1977.. 288.3	41	53	74	93	(NA)	
	1972.. 168.6	40	50	65	82	(NA)	
	1967.. 270.2	37	51	69	83	(NA)	
	1963.. 144.2	44	56	72	90	(NA)	
	1958.. 91.4	43	56	72	90	(NA)	
	1954.. 154.3	43	59	79	(NA)	(NA)	
35415	Lathes .....	1982.. 523.6	48	72	96	100	821
	1977.. 455.9	39	61	89	99 +	(NA)	
	1972.. 197.6	38	56	86	98	(NA)	
	1967.. 360.5	37	58	87	99	(NA)	
	1963.. 163.4	41	60	88	98	(NA)	
	1958.. 98.6	36	53	84	99	(NA)	
	1954.. 206.9	38	63	89	(NA)	(NA)	
35416	Milling machines .....	1982.. 264.5	59	81	96	100	1 445
	1977.. 167.8	74	86	96	100	(NA)	
	1972.. 86.6	62	73	87	96	(NA)	
	1967.. 258.2	65	83	93	99	(NA)	
	1963.. 112.7	62	75	89	97	(NA)	
	1958.. 89.4	64	80	93	99	(NA)	
	1954.. 122.5	65	77	92	(NA)	(NA)	
3541A	Machining centers <sup>171</sup> .....	1982.. 365.7	64	85	99 +	100	1 317
3541B	Station type machines <sup>171</sup> .....	1982.. 735.4	71	88	98	100	1 820

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
<b>35</b>	<b>MACHINERY, EXCEPT ELECTRICAL—Con.</b>						
<b>3541- 3541C</b>	<b>Machine tools, metal cutting types—Con.</b> Metal cutting machine tools, n.e.c. <sup>171</sup> ----- 1982..	250.6	49	61	80	94	1 409
35418	Machine tools for home workshops <sup>11</sup> ----- 1982..	85.7	41	57	84	99+	677
	----- 1977..	66.3	49	61	82	100	(NA)
35419	Parts for metal cutting machine tools ----- 1982..	891.9	22	36	54	76	231
	----- 1977..	502.1	24	35	57	83	(NA)
	----- 1972..	242.1	28	39	62	83	(NA)
	----- 1967..	241.0	35	47	63	84	(NA)
	----- 1963..	165.5	26	37	57	80	(NA)
	----- 1958..	88.7	24	36	57	81	(NA)
35410	Machine tools, metal cutting types, n.s.k. ----- 1982..	168.7	(X)	(X)	(X)	(X)	(X)
	----- 1977..	163.3	(X)	(X)	(X)	(X)	(NA)
	----- 1972..	71.4	(X)	(X)	(X)	(X)	(NA)
	----- 1967..	82.5	(X)	(X)	(X)	(X)	(NA)
	----- 1963..	24.4	(X)	(X)	(X)	(X)	(NA)
	----- 1958..	18.9	(X)	(X)	(X)	(X)	(NA)
<b>3542-</b>	<b>Machine tools, metal forming types</b> ----- 1982..	<b>1 383.9</b>	<b>18</b>	<b>30</b>	<b>49</b>	<b>69</b>	<b>164</b>
	----- 1977..	<b>1 114.7</b>	<b>18</b>	<b>30</b>	<b>50</b>	<b>70</b>	<b>(NA)</b>
	----- 1972..	<b>670.1</b>	<b>17</b>	<b>31</b>	<b>50</b>	<b>69</b>	<b>(NA)</b>
	----- 1967..	<b>676.6</b>	<b>21</b>	<b>35</b>	<b>55</b>	<b>73</b>	<b>(NA)</b>
	----- 1963..	<b>444.8</b>	<b>20</b>	<b>34</b>	<b>52</b>	<b>70</b>	<b>(NA)</b>
	----- 1958..	<b>289.5</b>	<b>20</b>	<b>34</b>	<b>52</b>	<b>70</b>	<b>(NA)</b>
35421	Punching, shearing, bending, and forming machines ----- 1982..	317.3	26	42	71	93	345
	----- 1977..	280.1	34	52	79	95	(NA)
	----- 1972..	153.4	24	38	63	88	(NA)
	----- 1967..	130.9	31	47	70	89	(NA)
	----- 1963..	92.5	27	42	64	86	(NA)
	----- 1958..	68.4	21	33	62	86	(NA)
35422	Presses, except forging ----- 1982..	369.2	41	61	83	98	593
	----- 1977..	282.6	43	60	79	97	(NA)
	----- 1972..	183.2	41	59	79	97	(NA)
	----- 1967..	261.3	46	64	80	97	(NA)
	----- 1963..	141.7	45	61	77	94	(NA)
	----- 1958..	79.1	41	61	80	95	(NA)
	----- 1954..	217.4	45	65	86	(NA)	(NA)
35423	Metal forming machine tools, n.e.c. ----- 1982..	217.0	47	60	80	97	1 036
	----- 1977..	171.7	40	56	80	99	(NA)
	----- 1972..	149.0	34	49	71	93	(NA)
	----- 1967..	122.9	39	56	77	94	(NA)
	----- 1963..	71.7	35	55	81	93	(NA)
	----- 1958..	60.8	48	59	74	92	(NA)
35424	Parts for metal forming machines ----- 1982..	380.0	24	35	55	77	274
	----- 1977..	295.5	25	40	60	84	(NA)
	----- 1972..	161.5	28	42	65	85	(NA)
	----- 1967..	125.7	28	41	61	86	(NA)
	----- 1963..	118.2	35	45	60	80	(NA)
	----- 1958..	78.2	27	39	60	80	(NA)
35420	Machine tools, metal forming types, n.s.k. ----- 1982..	100.5	(X)	(X)	(X)	(X)	(X)
	----- 1977..	85.0	(X)	(X)	(X)	(X)	(NA)
	----- 1972..	23.0	(X)	(X)	(X)	(X)	(NA)
	----- 1967..	35.6	(X)	(X)	(X)	(X)	(NA)
	----- 1963..	20.7	(X)	(X)	(X)	(X)	(NA)
	----- 1958..	3.0	(X)	(X)	(X)	(X)	(NA)
<b>3544-</b>	<b>Special dies, tools, jigs, and fixtures</b> ----- 1982..	<b>6 099.3</b>	<b>12</b>	<b>15</b>	<b>18</b>	<b>24</b>	<b>63</b>
	----- 1977..	<b>4 450.2</b>	<b>16</b>	<b>18</b>	<b>22</b>	<b>28</b>	<b>(NA)</b>
	----- 1972..	<b>2 713.5</b>	<b>14</b>	<b>17</b>	<b>21</b>	<b>27</b>	<b>(NA)</b>
	----- 1967..	<b>2 520.2</b>	<b>16</b>	<b>18</b>	<b>22</b>	<b>28</b>	<b>(NA)</b>
	----- 1963..	<b>1 608.1</b>	<b>17</b>	<b>19</b>	<b>23</b>	<b>30</b>	<b>(NA)</b>
	----- 1958..	<b>1 320.4</b>	<b>20</b>	<b>23</b>	<b>27</b>	<b>34</b>	<b>(NA)</b>
35441	Special dies and tools, die sets, jigs, and fixtures ----- 1982..	3 425.9	21	24	30	37	193
	----- 1977..	2 578.0	26	30	35	43	(NA)
	----- 1972..	1 520.1	24	27	33	41	(NA)
	----- 1967..	1 719.8	23	26	31	38	(NA)
35442	Industrial molds ----- 1982..	1 800.6	7	10	17	27	28
	----- 1977..	1 040.0	10	14	21	32	(NA)
	----- 1972..	640.3	11	14	23	35	(NA)
	----- 1967..	446.2	9	13	21	33	(NA)
35440	Special dies, tools, jigs, and fixtures, n.s.k. ----- 1982..	872.8	(X)	(X)	(X)	(X)	(X)
	----- 1977..	832.2	(X)	(X)	(X)	(X)	(NA)
	----- 1972..	553.1	(X)	(X)	(X)	(X)	(NA)
	----- 1967..	354.2	(X)	(X)	(X)	(X)	(NA)
	----- 1963..	135.9	(X)	(X)	(X)	(X)	(NA)
<b>3545-</b>	<b>Machine tool accessories</b> ----- 1982..	<b>3 069.1</b>	<b>17</b>	<b>24</b>	<b>38</b>	<b>53</b>	<b>119</b>
	----- 1977..	<b>2 238.9</b>	<b>16</b>	<b>26</b>	<b>40</b>	<b>56</b>	<b>(NA)</b>
	----- 1972..	<b>1 151.4</b>	<b>16</b>	<b>27</b>	<b>41</b>	<b>58</b>	<b>(NA)</b>
	----- 1967..	<b>1 222.4</b>	<b>15</b>	<b>26</b>	<b>41</b>	<b>58</b>	<b>(NA)</b>
	----- 1963..	<b>731.7</b>	<b>14</b>	<b>24</b>	<b>39</b>	<b>57</b>	<b>(NA)</b>
	----- 1958..	<b>470.2</b>	<b>16</b>	<b>25</b>	<b>41</b>	<b>57</b>	<b>(NA)</b>

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3545-	Machine tool accessories—Con.						
	1954__	541.0	11	20	36	(NA)	(NA)
35451	Small cutting tools for machine tools -----	1982__ 1 755.7	22	34	50	68	196
	1977__ 1 376.4	22	35	53	71	(NA)	(NA)
	1972__ 738.0	23	36	54	71	(NA)	(NA)
	1967__ 770.9	23	37	54	71	(NA)	(NA)
	1963__ 464.4	21	34	50	68	(NA)	(NA)
	1958__ 301.2	23	36	50	68	(NA)	(NA)
	1954__ 291.0	19	33	49	(NA)	(NA)	(NA)
35452	Precision measuring tools -----	1982__ 402.7	39	52	71	88	489
	1977__ 208.2	46	57	74	91	(NA)	(NA)
	1972__ 94.7	52	64	83	96	(NA)	(NA)
	1967__ 130.8	43	58	76	92	(NA)	(NA)
	1963__ 88.0	39	53	72	90	(NA)	(NA)
	1958__ 60.9	43	57	73	89	(NA)	(NA)
	1954__ 110.0	32	47	61	(NA)	(NA)	(NA)
35453	Machine tool accessories, n.e.c. -----	1982__ 593.6	27	38	55	74	297
	1977__ 430.9	21	34	54	74	(NA)	(NA)
	1972__ 218.8	17	30	52	76	(NA)	(NA)
	1967__ 239.5	19	30	51	75	(NA)	(NA)
	1963__ 152.6	17	29	49	72	(NA)	(NA)
	1958__ 96.2	17	31	51	74	(NA)	(NA)
	1954__ 140.0	15	25	45	(NA)	(NA)	(NA)
35450	Machine tool accessories, n.s.k. -----	1982__ 317.1	(X)	(X)	(X)	(X)	(X)
	1977__ 223.5	(X)	(X)	(X)	(X)	(X)	(X)
	1972__ 99.9	(X)	(X)	(X)	(X)	(X)	(X)
	1967__ 81.2	(X)	(X)	(X)	(X)	(X)	(X)
	1963__ 26.7	(X)	(X)	(X)	(X)	(X)	(X)
	1958__ 11.9	(X)	(X)	(X)	(X)	(X)	(X)
3546-	Power driven hand tools <sup>172</sup> -----	1982__ 1 594.8	53	69	85	95	983
	1977__ 1 496.5	51	70	91	98	(NA)	(NA)
	1972__ 622.9	41	65	88	97	(NA)	(NA)
35461	Electric, including battery powered <sup>11</sup> -----	1982__ 829.9	79	91	98	100	2 163
	1977__ 748.7	71	86	98	100	(NA)	(NA)
	1972__ 386.9	61	84	98	100	(NA)	(NA)
35462	Pneumatic, hydraulic, and powder-actuated <sup>11</sup> -----	1982__ 382.4	41	58	86	99	634
	1977__ 371.1	46	70	94	100	(NA)	(NA)
	1972__ 217.9	51	69	92	100	(NA)	(NA)
35463	Engine (internal combustion) driven <sup>173</sup> -----	1982__ 326.5	90	98	100	(X)	2 610
	1977__ 347.1	90	99	100	(X)	(NA)	(NA)
35460	Power driven hand tools, n.s.k. <sup>11</sup> -----	1982__ 56.0	(X)	(X)	(X)	(X)	(X)
	1977__ 29.6	(X)	(X)	(X)	(X)	(X)	(X)
	1972__ 18.1	(X)	(X)	(X)	(X)	(X)	(X)
3547-	Rolling mill machinery <sup>172</sup> -----	1982__ 445.1	50	70	90	99	809
	1977__ 361.0	54	70	87	98	(NA)	(NA)
	1972__ 247.9	63	80	90	99	(NA)	(NA)
35471	Hot rolling mill machinery, except tube rolling <sup>11</sup> -----	1982__ 180.5	68	93	100	(X)	1 467
	1977__ 147.0	77	95	100	(X)	(NA)	(NA)
	1972__ 134.7	86	96	(D)	(D)	(NA)	(NA)
35472	Cold rolling mill machinery <sup>11</sup> -----	1982__ 65.1	74	90	100	(X)	1 558
	1977__ 74.9	71	91	100	(X)	(NA)	(NA)
	1972__ 52.4	73	90	100	(X)	(NA)	(NA)
35473	Rolling mill machinery, n.e.c. <sup>11</sup> -----	1982__ 188.2	75	87	98	100	1 801
	1977__ 120.8	54	72	96	100	(NA)	(NA)
	1972__ 55.6	57	71	91	100	(NA)	(NA)
35470	Rolling mill machinery, n.s.k. <sup>11</sup> -----	1982__ 11.4	(X)	(X)	(X)	(X)	(X)
	1977__ 18.3	(X)	(X)	(X)	(X)	(X)	(X)
	1972__ 5.2	(X)	(X)	(X)	(X)	(X)	(X)
3549-	Metalworking machinery, n.e.c. <sup>172</sup> -----	1982__ 1 376.9	15	25	42	61	124
	1977__ 908.9	15	24	42	61	(NA)	(NA)
	1972__ 411.3	17	28	45	67	(NA)	(NA)
35492	Assembly machines <sup>11</sup> -----	1982__ 367.6	36	52	73	95	460
	1977__ 128.4	43	62	86	99+	(NA)	(NA)
35494	Automotive maintenance equipment, except hand tools (1967 product class 35484) -----	1982__ 200.3	60	81	98	100	1 072
	1977__ 188.0	44	68	92	99+	(NA)	(NA)
	1972__ 111.1	43	61	87	100	(NA)	(NA)
	1967__ 58.1	39	62	88	100	(NA)	(NA)
	1963__ 47.7	38	58	80	98	(NA)	(NA)
	1958__ 44.2	34	56	80	98	(NA)	(NA)
	1954__ 44.1	43	58	81	(NA)	(NA)	(NA)
35495	Metalworking machinery, n.e.c. <sup>11</sup> -----	1982__ 330.3	18	29	52	81	185
	1977__ 294.9	20	31	51	77	(NA)	(NA)
35496	Gas cutting and welding equipment <sup>174</sup> -----	1982__ 226.6	62	79	95	100	1 286
35497	Other welding equipment <sup>174</sup> -----	1982__ 152.7	54	72	93	100	1 154
35490	Metalworking machinery, n.e.c., n.s.k. <sup>11</sup> -----	1982__ 99.5	(X)	(X)	(X)	(X)	(X)
	1977__ 84.0	(X)	(X)	(X)	(X)	(X)	(X)
	1972__ 52.0	(X)	(X)	(X)	(X)	(X)	(X)
3551-	Food products machinery -----	1982__ 2 159.8	14	21	35	54	94

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3551-	Food products machinery—Con.						
	1977--	1 576.2	15	23	38	56	
	1972--	867.2	17	24	37	56	
	1967--	689.9	16	24	38	57	
	1963--	517.3	15	23	38	56	
	1958--	399.8	12	20	36	54	
	1954--	371.4	16	25	41	(NA)	
35511	Dairy and milk products plant machinery <sup>175</sup> -----	1982--	176.4	60	74	93	
	1977--	128.5	62	74	91	100	
	1972--	57.4	57	72	93	99+	
35512	Commercial food products machinery <sup>176</sup> -----	1982--	479.7	33	46	64	
	1977--	357.2	31	42	62	84	
	1972--	185.0	33	41	59	83	
	1967--	146.4	38	46	63	85	
	1963--	117.6	36	44	60	81	
	1958--	101.0	28	39	55	76	
35513	Industrial food products machinery <sup>177</sup> -----	1982--	620.1	24	34	54	
	1977--	452.0	24	37	57	77	
	1972--	296.2	23	33	53	81	
35514	Packing, packaging, and bottling machinery <sup>175 176 177</sup> -----	1982--	725.2	20	33	56	
	1977--	491.0	28	41	64	82	
	1972--	232.1	31	42	68	88	
35510	Food products machinery, n.s.k. -----	1982--	158.5	(X)	(X)	(X)	
	1977--	147.5	(X)	(X)	(X)	(X)	
	1972--	96.5	(X)	(X)	(X)	(X)	
	1967--	74.7	(X)	(X)	(X)	(X)	
	1963--	27.6	(X)	(X)	(X)	(X)	
	1958--	23.5	(X)	(X)	(X)	(X)	
3552-	Textile machinery -----	1982--	965.5	21	32	47	
	1977--	857.1	22	34	50	66	
	1972--	738.1	29	43	59	67	
	1967--	652.6	32	47	63	74	
	1963--	499.1	34	50	65	77	
	1958--	322.2	33	45	59	78	
	1954--	304.1	31	44	59	74	
35521	Textile machinery -----	1982--	454.3	25	36	55	
	1977--	361.6	22	35	59	80	
	1972--	373.8	34	53	71	83	
	1967--	348.8	38	57	76	88	
	1963--	252.6	39	57	75	89	
	1958--	143.7	35	48	67	91	
	1954--	143.3	34	49	67	86	
35522	Parts and attachments for textile machinery -----	1982--	390.0	36	46	63	
	1977--	405.2	34	47	62	80	
	1972--	305.7	33	47	66	78	
	1967--	267.4	34	47	67	82	
	1963--	232.1	37	49	66	83	
	1958--	168.7	38	49	63	80	
	1954--	160.7	32	44	58	78	
35520	Textile machinery, n.s.k. -----	1982--	121.3	(X)	(X)	(X)	
	1977--	90.3	(X)	(X)	(X)	(X)	
	1972--	58.6	(X)	(X)	(X)	(X)	
	1967--	36.4	(X)	(X)	(X)	(X)	
	1963--	14.4	(X)	(X)	(X)	(X)	
	1958--	9.8	(X)	(X)	(X)	(X)	
3553-	Woodworking machinery <sup>173</sup> -----	1982--	656.7	38	48	65	
	1977--	547.3	35	46	60	82	
	1972--	441.6	38	50	67	79	
	1967--	274.4	33	45	62	83	
	1963--	220.8	31	43	59	81	
	1958--	174.5	33	45	61	77	
	1954--	163.4	30	44	62	79	
35531	Woodworking machinery, except for home workshop <sup>173</sup> -----	1982--	327.6	19	33	58	
	1977--	334.6	24	37	59	85	
	1972--	372.5	39	50	68	86	
	1967--	231.2	37	46	64	85	
	1963--	186.0	35	45	60	86	
	1958--	145.1	37	48	63	79	
	1954--	136.2	33	45	62	81	
35532	Woodworking machinery for home workshop -----	1982--	262.6	87	98	100	
	1977--	143.6	98	(D)	100	(X)	
	1972--	51.5	90	97	100	(X)	
	1967--	29.1	82	93	100	(X)	
	1963--	29.0	71	87	98	100	
	1958--	25.7	63	84	96	99	
	1954--	27.2	67	79	92	(NA)	
35530	Woodworking machinery, n.s.k. -----	1982--	66.5	(X)	(X)	(X)	
	1977--	69.2	(X)	(X)	(X)	(X)	
	1972--	17.6	(X)	(X)	(X)	(X)	
	1967--	14.1	(X)	(X)	(X)	(X)	
	1963--	5.8	(X)	(X)	(X)	(X)	
	1958--	3.7	(X)	(X)	(X)	(X)	
3554-	Paper industries machinery -----	1982--	1 199.0	35	46	61	
	1977--	698.3	38	49	65	79	
	1972--	381.4	31	43	59	83	

See footnotes at end of table.

Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
35	MACHINERY, EXCEPT ELECTRICAL—Con.							
3554-	Paper industries machinery—Con.							
	1967..	515.1	40	48	65	84	(NA)	
	1963..	347.6	44	53	70	87	(NA)	
	1958..	280.1	46	55	70	97	(NA)	
	1954..	174.7	33	42	61	(NA)	(NA)	
35541	Paper industries machinery <sup>178</sup> .....	1982..	853.5	41	51	69	87	974
35542	Parts for paper industries machinery <sup>178</sup> .....	1982..	276.1	36	53	76	94	470
35540	Paper industries machinery, n.s.k. <sup>178</sup> .....	1982..	69.4	(X)	(X)	(X)	(X)	(X)
3555-	Printing trades machinery .....	1982..	2 188.2	36	46	61	76	488
	1977..	1 287.3	37	45	60	78	(NA)	
	1972..	736.6	36	44	60	76	(NA)	
	1967..	656.0	43	52	67	82	(NA)	
	1963..	403.2	39	47	62	79	(NA)	
	1958..	270.7	37	48	63	79	(NA)	
	1954..	228.8	33	49	65	(NA)	(NA)	
35551	Printing presses, lithographic <sup>11</sup> .....	1982..	665.0	76	88	98	100	2 319
	1977..	290.9	70	83	96	100	(NA)	
	1972..	156.0	71	85	97	100	(NA)	
35552	Printing presses, other than lithographic <sup>11</sup> .....	1982..	148.9	29	50	82	99	434
	1977..	121.3	45	62	87	99+	(NA)	
	1972..	90.2	51	72	91	100	(NA)	
35553	Typesetting machinery <sup>11</sup> .....	1982..	303.4	87	98	100	(X)	2 117
	1977..	252.8	76	90	(D)	100	(NA)	
	1972..	104.1	72	89	100	(X)	(NA)	
35556	Binding machinery and equipment <sup>179</sup> .....	1982..	171.6	59	76	96	100	1 496
35557	Printing trades machinery, n.e.c. <sup>179</sup> .....	1982..	783.4	25	36	57	79	287
35550	Printing trades machinery, n.s.k. ....	1982..	116.0	(X)	(X)	(X)	(X)	(X)
	1977..	90.7	(X)	(X)	(X)	(X)	(X)	(NA)
	1972..	49.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1967..	38.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1963..	21.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1958..	23.4	(X)	(X)	(X)	(X)	(X)	(NA)
3559-	Special industry machinery, n.e.c. ....	1982..	5 353.7	8	15	26	43	48
	1977..	3 465.2	11	17	27	46	(NA)	
	1972..	2 367.1	16	22	34	51	(NA)	
	1967..	1 670.3	11	17	29	47	(NA)	
	1963..	988.4	10	16	30	47	(NA)	
	1958..	726.2	10	16	28	46	(NA)	
35591	Chemical manufacturing machinery .....	1982..	641.3	40	56	74	90	725
	1977..	436.7	42	60	78	93	(NA)	
	1972..	212.5	29	44	64	87	(NA)	
	1967..	284.5	23	35	59	83	(NA)	
	1963..	152.4	28	42	66	86	(NA)	
	1958..	118.5	21	33	56	81	(NA)	
	1954..	102.8	25	40	64	(NA)	(NA)	
35592	Foundry machinery .....	1982..	260.0	49	63	82	97	835
	1977..	319.2	40	55	77	93	(NA)	
	1972..	132.3	56	70	86	99	(NA)	
	1967..	143.9	45	59	81	97	(NA)	
	1963..	89.6	41	55	79	95	(NA)	
	1958..	52.6	47	61	80	96	(NA)	
	1954..	62.5	35	55	77	(NA)	(NA)	
35593	Plastics-working machinery .....	1982..	785.7	31	45	63	82	349
	1977..	669.6	37	53	74	90	(NA)	
	1972..	434.1	31	47	72	90	(NA)	
	1967..	247.6	25	39	66	89	(NA)	
	1963..	137.1	28	45	71	89	(NA)	
	1958..	50.8	35	54	75	93	(NA)	
	1954..	37.6	31	47	73	(NA)	(NA)	
35594	Rubber-working machinery .....	1982..	187.0	36	57	81	98	520
	1977..	158.1	49	63	84	99	(NA)	
	1972..	137.3	53	69	88	99	(NA)	
	1967..	116.6	53	73	89	99	(NA)	
	1963..	76.8	51	72	88	98	(NA)	
	1958..	53.9	55	70	85	97	(NA)	
	1954..	52.5	61	73	87	(NA)	(NA)	
35595	Special industry machinery, n.e.c. ....	1982..	2 933.5	11	19	35	56	83
	1977..	1 565.3	12	20	36	55	(NA)	
	1972..	1 281.4	26	33	47	64	(NA)	
	1967..	778.6	21	29	44	63	(NA)	
	1963..	500.2	19	27	41	58	(NA)	
	1958..	414.7	17	26	41	59	(NA)	
35590	Special industry machinery, n.e.c., n.s.k. ....	1982..	546.2	(X)	(X)	(X)	(X)	(X)
	1977..	316.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1972..	169.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1967..	99.0	(X)	(X)	(X)	(X)	(X)	(NA)
	1963..	32.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1958..	35.7	(X)	(X)	(X)	(X)	(X)	(NA)
3561-	Pumps and pumping equipment <sup>180</sup> .....	1982..	5 723.1	17	27	48	72	159
	1977..	3 522.8	17	27	46	71	(NA)	

See footnotes at end of table.



Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3561-	Pumps and pumping equipment <sup>180</sup> —Con.						
	111972..	1 632.9	14	24	44	69	(NA)
35611	Industrial pumps, except fluid power pumps .....	1982.. 1 916.9	21	35	58	84	232
	1977.. 1 386.7	34	37	60	84	(NA)	(NA)
	1972.. 611.9	22	35	57	81	(NA)	(NA)
	1967.. 436.9	23	34	53	80	(NA)	(NA)
	1963.. 321.9	23	35	55	79	(NA)	(NA)
35613	Domestic water systems .....	1982.. 215.5	49	69	93	100	897
	1977.. 223.8	45	67	92	100	(NA)	(NA)
	1972.. 151.1	41	63	89	100	(NA)	(NA)
	1967.. 140.3	34	56	84	99	(NA)	(NA)
	1963.. 83.7	42	64	92	99	(NA)	(NA)
	1958.. 67.7					(NA)	(NA)
	1954.. 80.0	33	56	84	(NA)	(NA)	(NA)
35615	Pumps, n.e.c. <sup>181</sup> .....	1982.. 1 048.2	40	53	74	92	594
	1977.. 395.7	29	45	68	91	(NA)	(NA)
	111972.. 186.4	26	41	67	87	(NA)	(NA)
35617	Fluid power pumps, except aerospace <sup>182</sup> .....	1982.. 648.5	35	54	81	97	483
35618	Aerospace fluid power pumps <sup>182</sup> .....	1982.. 81.3	92	99	100	(X)	(D)
3561A	Parts for fluid power pumps, except aerospace <sup>183</sup> .....	1982.. 218.6	63	80	96	100	1 268
3561B	Parts for aerospace fluid power pumps <sup>183</sup> .....	1982.. 103.8	88	(D)	(D)	(X)	2 412
3561C	Parts for pumps, except fluid power <sup>183</sup> .....	1982.. 1 298.9	26	40	66	91	302
35610	Pumps and compressors, n.s.k. ....	1982.. 191.4	(X)	(X)	(X)	(X)	(X)
	1977.. 166.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 75.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 69.6	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 18.4	(X)	(X)	(X)	(X)	(X)	(NA)
	1958.. 11.8	(X)	(X)	(X)	(X)	(X)	(NA)
3562-	Ball and roller bearings .....	1982.. 2 973.1	48	66	85	98	762
	1977.. 2 444.5	56	76	86	99	(NA)	(NA)
	1972.. 1 418.7	53	72	88	98	(NA)	(NA)
	1967.. 1 292.2	54	74	89	99	(NA)	(NA)
	1963.. 961.0	57	76	91	98	(NA)	(NA)
	1958.. 636.8	56	76	91	99	(NA)	(NA)
	1954.. 533.8	59	78	91	(NA)	(NA)	(NA)
35621	Ball bearings, unmounted .....	1982.. 1 087.1	54	72	91	100	1 039
	1977.. 749.9	56	74	94	100	(NA)	(NA)
	1972.. 474.2	57	72	93	100	(NA)	(NA)
	1967.. 472.7	61	78	97	100	(NA)	(NA)
	1963.. 384.1	63	79	97	100	(NA)	(NA)
	1958.. 289.1	66	81	98	100	(NA)	(NA)
	1954.. 213.7	71	85	98	(NA)	(NA)	(NA)
35622	Tapered roller bearings, unmounted .....	1982.. 710.9	89	98	100	(X)	(D)
	1977.. 748.6	91	98	100	(X)	(NA)	(NA)
	1972.. 420.0	91	(D)	100	(X)	(NA)	(NA)
	1967.. 367.7	92	99	100	(X)	(NA)	(NA)
35623	Roller bearings, except tapered, unmounted .....	1982.. 614.1	62	78	98	100	1 696
	1977.. 472.9	66	80	96	100	(NA)	(NA)
	1972.. 280.9	65	78	94	100	(NA)	(NA)
	1967.. 225.0	67	83	97	100	(NA)	(NA)
35624	Mounted bearings, except plain .....	1982.. 241.7	65	94	100	(X)	1 347
	1977.. 213.1	65	90	(D)	100	(NA)	(NA)
	1972.. 100.9	70	96	100	(X)	(NA)	(NA)
	1967.. 96.0	64	94	100	(X)	(NA)	(NA)
	1963.. 62.1	71	95	100	(X)	(NA)	(NA)
	1958.. 35.0	72	98	100	(X)	(NA)	(NA)
	1954.. 24.4	68	96	100	(X)	(NA)	(NA)
35629	Parts for ball and roller bearings .....	1982.. 298.4	63	77	93	100	1 284
	1977.. 243.1	68	79	95	100	(NA)	(NA)
	1972.. 138.2	66	79	97	100	(NA)	(NA)
	1967.. 118.7	58	77	95	100	(NA)	(NA)
	1963.. 65.0	56	74	93	100	(NA)	(NA)
	1958.. 41.1	55	74	96	100	(NA)	(NA)
	1954.. 45.1	61	78	94	(NA)	(NA)	(NA)
35620	Ball and roller bearings, n.s.k. ....	1982.. 20.9	(X)	(X)	(X)	(X)	(X)
	1977.. 16.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 4.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 12.1	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 3.3	(X)	(X)	(X)	(X)	(X)	(NA)
	1958.. 2.3	(X)	(X)	(X)	(X)	(X)	(NA)
3563-	Air and gas compressors <sup>180</sup> .....	1982.. 2 846.2	38	53	74	88	563
	1977.. 1 923.4	40	57	79	92	(NA)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
35	<b>MACHINERY, EXCEPT ELECTRICAL—Con.</b>						
3563-	<b>Air and gas compressors<sup>180</sup>—Con.</b>						
	1972--	722.7	42	62	84	94	(NA)
35631	Air and gas compressors and vacuum pumps <sup>11</sup> -----	1982-- 1 677.1	44	59	79	94	722
	1977-- 1 290.3	41	62	83	95	(NA)	(NA)
	1972-- 480.8	47	66	86	97	(NA)	(NA)
35632	Parts for air and gas compressors <sup>183</sup> -----	1982-- 652.7	63	81	95	99 +	1 226
	1977-- 384.1	67	83	96	100	(NA)	(NA)
	1972-- 148.4	52	78	95	100	(NA)	(NA)
35635	Industrial spraying equipment <sup>181</sup> -----	1982-- 442.0	62	81	93	99 +	1 207
	1977-- 221.6	92	88	99	100	(NA)	(NA)
	1972-- 93.5	86	91	100	(X)	(X)	(NA)
35630	Air and gas compressors, n.s.k. <sup>184</sup> -----	1982-- 74.4	(X)	(X)	(X)	(X)	(X)
	1977-- 27.4	(X)	(X)	(X)	(X)	(X)	(NA)
3564-	<b>Blowers and fans -----</b>	1982-- 1 994.5	13	24	41	63	115
	1977-- 1 422.3	15	25	44	68	(NA)	(NA)
	1972-- 682.0	16	28	48	72	(NA)	(NA)
	1967-- 499.1	17	29	50	75	(NA)	(NA)
	1963-- 299.4	20	32	54	78	(NA)	(NA)
	1958-- 252.9	23	35	55	75	(NA)	(NA)
	1954-- 274.0	23	38	57	(NA)	(NA)	(NA)
35643	Centrifugal fans and blowers <sup>11</sup> -----	1982-- 556.9	31	46	71	96	398
	1977-- 354.1	36	53	79	98	(NA)	(NA)
	1972-- 181.0	33	49	81	99	(NA)	(NA)
35644	Propeller and axial fans, and power roof ventilators <sup>11</sup> -----	1982-- 464.8	30	46	72	95	390
	1977-- 303.3	26	43	76	98	(NA)	(NA)
	1972-- 159.9	23	39	68	91	(NA)	(NA)
35645	Air purification equipment for environmental systems <sup>11</sup> -----	1982-- 425.5	28	41	63	87	336
	1977-- 260.7	32	48	73	94	(NA)	(NA)
	1972-- 121.3	36	52	78	97	(NA)	(NA)
35646	Air purification equipment for industrial gases <sup>11</sup> -----	1982-- 425.6	40	55	79	97	591
	1977-- 381.7	42	64	89	99	(NA)	(NA)
	1972-- 198.0	48	66	84	98	(NA)	(NA)
35640	Blowers and fans, n.s.k. -----	1982-- 121.7	(X)	(X)	(X)	(X)	(X)
	1977-- 122.5	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 21.8	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967-- 21.7	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963-- 13.2	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958-- 12.2	(X)	(X)	(X)	(X)	(NA)	(NA)
35650	Industrial patterns, except shoe patterns -----	1982-- 561.5	6	10	17	29	22
	1977-- 411.9	8	12	20	33	(NA)	(NA)
	1972-- 234.4	6	10	19	32	(NA)	(NA)
	1967-- 233.7	8	12	21	34	(NA)	(NA)
	1963-- 159.9	8	12	21	33	(NA)	(NA)
	1958-- 121.3	6	10	17	28	(NA)	(NA)
	1954-- 127.6	14	19	28	(NA)	(NA)	(NA)
35660	Speed changers, drives, and gears (1967 product class 35662) <sup>185</sup> -----	1982-- 1 557.4	22	36	58	78	228
	1977-- 1 199.7	26	39	62	79	(NA)	(NA)
	1972-- 186 593.0	25	38	60	79	(NA)	(NA)
	1967-- 506.4	24	40	63	81	(NA)	(NA)
	1963-- 333.3	22	38	59	79	(NA)	(NA)
	1958-- 234.2	23	35	56	78	(NA)	(NA)
	1954-- 218.2	20	34	58	(NA)	(NA)	(NA)
3567-	<b>Industrial furnaces and ovens -----</b>	1982-- 1 026.8	22	35	52	71	206
	1977-- 707.1	22	33	52	71	(NA)	(NA)
	1972-- 341.1	23	36	59	77	(NA)	(NA)
	1967-- 415.9	25	39	58	79	(NA)	(NA)
	1963-- 237.7	23	34	53	76	(NA)	(NA)
	1958-- 184.8	29	38	53	75	(NA)	(NA)
35671	Electric industrial furnaces, ovens, and kilns -----	1982-- 295.2	36	52	75	93	468
	1977-- 140.3	31	47	75	100	(NA)	(NA)
	1972-- 67.5	44	59	84	99	(NA)	(NA)
	1967-- 90.8	36	53	82	98	(NA)	(NA)
	1963-- 44.7	49	65	86	99	(NA)	(NA)
	1958-- 35.7	31	49	77	96	(NA)	(NA)
35672	Fuel-fired industrial furnaces, ovens, and kilns -----	1982-- 248.6	34	49	72	94	479
	1977-- 144.4	44	58	85	(D)	(NA)	(NA)
	1972-- 97.2	43	59	81	98	(NA)	(NA)
	1967-- 155.7	45	58	81	97	(NA)	(NA)
	1963-- 76.6	41	57	82	97	(NA)	(NA)
	1958-- 75.5	52	63	84	97	(NA)	(NA)
35674	High frequency induction and dielectric heating equipment <sup>11</sup> -----	1982-- 131.9	53	70	93	100	1 022
	1977-- 133.4	44	61	85	99 +	(NA)	(NA)
35675	Electrical heating equipment for industrial use, n.e.c. <sup>11</sup> -----	1982-- 289.1	38	50	70	91	655
	1977-- 204.1	45	59	81	98	(NA)	(NA)
35670	Industrials furnaces and ovens, n.s.k. -----	1982-- 62.0	(X)	(X)	(X)	(X)	(X)
	1977-- 84.9	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972-- 29.4	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967-- 20.3	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963-- 6.5	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958-- 6.1	(X)	(X)	(X)	(X)	(NA)	(NA)
3568-	<b>Power transmission equipment, n.e.c.<sup>185</sup> -----</b>	1982-- 1 985.6	24	36	59	79	256

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
35	MACHINERY, EXCEPT ELECTRICAL—Con.							
3568-	Power transmission equipment, n.e.c. <sup>185</sup> —Con.							
	1977--	1 710.9	29	45	67	87	(NA)	
	<sup>11</sup> 1972--	975.0	32	51	71	86	(NA)	
35681	Plain bearings and bushings (1967 product class 35661) -----	1982--	385.0	31	46	71	93	387
	1977--	275.1	34	50	78	98	(NA)	
	1972--	121.0	28	43	72	98	(NA)	
	1967--	109.5	26	44	71	95	(NA)	
	1963--	87.9	38	56	79	96	(NA)	
	1958--	67.0	51	67	88	99	(NA)	
35683	Mechanical power transmission equipment, n.e.c. (1967 product class 35663)-----	1982--	1 556.3	29	44	70	88	375
	1977--	1 419.1	34	52	77	93	(NA)	
	1972--	854.0	35	57	78	92	(NA)	
	1967--	604.5	34	53	75	90	(NA)	
	1963--	449.5	35	53	72	89	(NA)	
	1958--	310.4	36	53	73	89	(NA)	
	1954--	235.0	34	47	65	(NA)	(NA)	
35680	Power transmission equipment, n.e.c., n.s.k. -----	1982--	44.3	(X)	(X)	(X)	(X)	(X)
	1977--	16.6	(X)	(X)	(X)	(X)	(NA)	
	1972--	<sup>(186)</sup>	(X)	(X)	(X)	(X)	(NA)	
	1967--	62.9	(X)	(X)	(X)	(X)	(NA)	
3569-	General industrial machinery, n.e.c. <sup>11</sup> -----	1982--	4 410.7	9	14	24	39	41
	1977--	2 689.4	8	13	23	38	(NA)	
	1972--	1 132.8	7	13	26	44	(NA)	
35691	Packing, packaging, and bottling machinery <sup>11</sup> -----	1982--	885.2	22	32	53	74	224
	1977--	440.5	24	34	51	75	(NA)	
	1972--	177.4	25	39	58	82	(NA)	
35693	Filters and strainers, except fluid power <sup>187</sup> -----	1982--	1 137.4	23	32	52	76	215
35694	Filters for hydraulic fluid power systems, excluding aircraft type <sup>187</sup> ----	1982--	114.5	50	72	99	100	968
35695	Filters for pneumatic fluid power systems, excluding aircraft type <sup>187</sup> -----	1982--	60.2	82	93	100	(X)	2 568
35696	Filters for aircraft fluid power (hydraulic and pneumatic) systems <sup>187</sup> -----	1982--	41.0	72	98	100	(X)	1 705
35699	General industrial machinery, n.e.c. <sup>11</sup> -----	1982--	1 680.4	13	22	39	61	110
	1977--	1 311.6	11	17	31	51	(NA)	
	1972--	535.5	12	20	37	62	(NA)	
35690	General industrial machinery, n.e.c., n.s.k. <sup>11</sup> -----	1982--	492.0	(X)	(X)	(X)	(X)	(X)
	1977--	307.3	(X)	(X)	(X)	(X)	(NA)	
	1972--	144.5	(X)	(X)	(X)	(X)	(NA)	
3573-	Electronic computing equipment-----	1982--	34 750.7	42	55	70	82	754
	1977--	12 673.2	45	57	71	85	(NA)	
	1972--	6 108.0	59	70	84	94	(NA)	
	1967--	4 048.8	(NA)	(NA)	(NA)	(NA)	(NA)	
35731	Electronic computers <sup>11</sup> -----	1982--	10 927.6	44	60	79	92	783
	1977--	3 546.9	49	67	88	97	(NA)	
	1972--	1 884.3	75	86	94	99	(NA)	
35732	Peripheral equipment for computers <sup>11</sup> -----	1982--	14 662.4	37	54	71	87	609
	1977--	6 087.9	44	55	73	89	(NA)	
	1972--	2 745.3	52	64	83	94	(NA)	
35734	Parts produced by complete machine manufacturers <sup>11</sup> -----	1982--	6 974.0	70	82	93	99	2 004
	1977--	2 414.2	63	76	93	99	(NA)	
35735	Parts produced by others <sup>11</sup> -----	1982--	1 327.8	22	36	56	76	222
	1977--	419.6	25	38	62	88	(NA)	
35730	Electronic computing equipment, n.s.k. -----	1982--	858.9	(X)	(X)	(X)	(X)	(X)
	1977--	204.6	(X)	(X)	(X)	(X)	(NA)	
	1972--	75.2	(X)	(X)	(X)	(X)	(NA)	
	1967--	18.5	(X)	(X)	(X)	(X)	(NA)	
3574-	Calculating and accounting machines -----	1982--	1 397.6	41	67	91	99	671
	1977--	836.2	59	78	94	99+	(NA)	
	1972--	694.3	63	78	94	99	(NA)	
	1967--	630.8	74	85	92	98	(NA)	
35743	Accounting machines and cash registers <sup>11</sup> -----	1982--	952.6	58	84	96	100	1 059
	1977--	<sup>188</sup> 402.8	69	85	98	100	(NA)	
	1972--	<sup>(189)</sup>	<sup>(189)</sup>	<sup>(189)</sup>	<sup>(189)</sup>	<sup>(189)</sup>	(NA)	
35744	Calculators and adding machines <sup>190</sup> -----	1982--	250.5	90	99	100	(X)	(D)
35745	Parts for calculating and accounting machines (1967 product class 35793)-----	1982--	182.0	61	82	99	100	1 442
	1977--	59.0	52	84	100	(X)	(NA)	
	1972--	<sup>189</sup> 457.4	78	89	96	100	(NA)	
	1967--	131.7	90	96	99+	100	(NA)	
35740	Calculating and accounting machines, n.s.k.-----	1982--	12.6	(X)	(X)	(X)	(X)	(X)
	1977--	4.8	(X)	(X)	(X)	(X)	(NA)	
	1972--	11.0	(X)	(X)	(X)	(X)	(NA)	
	1967--	34.8	(X)	(X)	(X)	(X)	(NA)	

See footnotes at end of table.

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
35760	Scales and balances, except laboratory ----- 1982 .....	545.2	37	52	75	93	554
	1977 .....	328.9	52	67	85	97	(NA)
	1972 .....	182.1	51	66	84	97	(NA)
	1967 .....	131.4	54	69	88	99	(NA)
	1963 .....	90.0	52	68	86	98	(NA)
	1958 .....	71.0	45	67	85	98	(NA)
3579-	Office machines, n.e.c., and typewriters <sup>11</sup> ----- 1982 .....	3 512.3	46	60	81	93	823
	1977 .....	2 020.3	56	70	84	94	(NA)
	1972 .....	1 046.9	59	71	85	94	(NA)
35792	Automatic typing and word processing machines <sup>191</sup> ----- 1982 .....	1 491.5	65	87	98	100	1 345
35793	Duplicating machines <sup>11</sup> ----- 1982 .....	158.8	91	99 +	100	(X)	2 630
	1977 .....	199.7	88	98	100	(X)	(NA)
	1972 .....	83.6	87	95	100	(X)	(NA)
35795	Mailing, letter handling, and addressing machines <sup>11</sup> ----- 1982 .....	387.8	67	87	99 +	100	1 865
	1977 .....	235.3	68	86	99 +	100	(NA)
	1972 .....	128.6	77	89	100	(X)	(NA)
35799	Standard typewriters and office machines, n.e.c. <sup>192</sup> ----- 1982 .....	1 122.6	64	75	91	99	2 122
3579A	Parts for office machines, n.e.c. <sup>193</sup> ----- 1982 .....	306.7	41	59	85	99 +	617
35790	Office machines, n.e.c., n.s.k. ----- 1982 .....	44.9	(X)	(X)	(X)	(X)	(X)
	1977 .....	38.0	(X)	(X)	(X)	(X)	(NA)
	1972 .....	18.0	(X)	(X)	(X)	(X)	(NA)
	1967 .....	18.8	(X)	(X)	(X)	(X)	(NA)
3581-	Automatic merchandising machines ----- 1982 .....	445.7	49	70	91	98	822
	1977 .....	396.2	44	65	90	98	(NA)
	1972 .....	306.3	50	68	88	96	(NA)
	1967 .....	261.2	61	73	87	96	(NA)
	1963 .....	206.6	58	68	80	93	(NA)
	1958 .....	130.9	43	57	75	91	(NA)
35811	Automatic merchandising machines ----- 1982 .....	334.1	58	82	97	100	1 137
	1977 .....	294.9	48	72	97	100	(NA)
	1972 .....	231.5	57	79	95	100	(NA)
	1967 .....	198.3	69	83	94	99 +	(NA)
	1963 .....	164.3	65	77	88	97	(NA)
35812	Parts for automatic merchandising machines ----- 1982 .....	96.2	65	81	98	100	1 188
	1977 .....	84.3	76	87	99	100	(NA)
	1972 .....	61.1	57	86	98	100	(NA)
	1967 .....	45.5	65	77	94	100	(NA)
	1963 .....	32.8	54	73	93	99 +	(NA)
35810	Automatic merchandise machines, n.s.k. ----- 1982 .....	15.5	(X)	(X)	(X)	(X)	(X)
	1977 .....	17.0	(X)	(X)	(X)	(X)	(NA)
	1972 .....	13.7	(X)	(X)	(X)	(X)	(NA)
	1967 .....	17.4	(X)	(X)	(X)	(X)	(NA)
	1963 .....	9.5	(X)	(X)	(X)	(X)	(NA)
35820	Commercial laundry equipment <sup>194</sup> ----- 1982 .....	338.7	41	55	78	96	573
	1977 .....	233.6	51	61	80	96	(NA)
	1972 .....	185.3	43	57	77	94	(NA)
3585-	Refrigeration and heating equipment <sup>195</sup> ----- 1982 .....	11 035.6	32	44	63	78	359
	1977 .....	8 501.7	33	45	65	81	(NA)
	1972 .....	<sup>256</sup> 232.1	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
	1967 .....	<sup>253</sup> 469.0	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
	1963 .....	<sup>252</sup> 104.6	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	( <sup>25</sup> )	(NA)
35851	Heat transfer equipment <sup>11</sup> ----- 1982 .....	2 908.0	45	58	76	91	743
	1977 .....	2 251.2	50	65	80	94	(NA)
	1972 .....	1 680.5	45	58	78	95	(NA)
35852	Unitary air conditioners <sup>11</sup> ----- 1982 .....	1 972.1	62	77	91	99	1 368
	1977 .....	1 673.0	47	68	91	99 +	(NA)
	1972 .....	1 070.6	48	69	90	99 +	(NA)
35853	Commercial refrigerators ----- 1982 .....	1 070.8	26	39	61	83	300
	1977 .....	759.4	26	39	60	84	(NA)
	1972 .....	482.3	29	41	60	81	(NA)
	1967 .....	341.5	21	31	54	80	(NA)
	1963 .....	253.7	21	34	56	77	(NA)
35854	Compressors and compressor units ----- 1982 .....	1 734.7	68	84	98	100	1 388
	1977 .....	1 580.3	76	94	99	100	(NA)
	1972 .....	1 065.4	72	94	99	100	(NA)
	1967 .....	494.5	78	91	99	100	(NA)
	1963 .....	269.4	77	90	99	100	(NA)
35855	Refrigeration condensing units ----- 1982 .....	196.9	60	74	95	100	1 120
	1977 .....	175.6	55	74	93	100	(NA)
	1972 .....	146.8	48	66	92	100	(NA)
	1967 .....	73.3	63	78	96	100	(NA)
	1963 .....	73.5	52	70	95	100	(NA)
	1958 .....	70.3	69	72	93	100	(NA)
35856	Room air conditioners and dehumidifiers <sup>11</sup> ----- 1982 .....	897.5	71	92	99 +	100	1 472
	1977 .....	720.4	60	82	98	100	(NA)
	1972 .....	670.6	54	75	97	100	(NA)
35859	Refrigeration and air conditioning equipment, n.e.c. <sup>196</sup> ----- 1982 .....	428.9	38	52	78	97	524
3585A	Warm air furnaces and humidifiers <sup>196</sup> ----- 1982 .....	426.3	41	60	85	99	593
3585B	Parts for refrigeration and heating equipment <sup>196</sup> ----- 1982 .....	871.9	30	43	62	82	345

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
35	MACHINERY, EXCEPT ELECTRICAL—Con.						
3585- 35850	Refrigeration and heating equipment <sup>195</sup> —Con. Refrigeration and heating equipment, n.s.k. -----	1982__ 528.5 1977__ 251.3 1972__ 152.4 1967__ 88.2 1963__ 46.7 1958__ 31.4	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
35860	Measuring and dispensing pumps -----	1982__ 590.7 1977__ 265.6 1972__ 183.4 1967__ 139.3 1963__ 121.0 1958__ 86.2 1954__ 80.8	53 38 38 42 37 52 50	68 57 60 64 61 73 76	88 88 86 90 91 96 96	99 99 99 99+ 99 99 (NA)	1 018 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
3589-	Service industry machinery, n.e.c. -----	1982__ 2 550.4 1977__ 1 687.6 1972__ 864.4 1967__ 539.8 1963__ 341.5 1958__ 222.0	12 11 11 13 14 14	20 20 20 22 23 23	36 36 36 38 37 (NA)	53 55 57 60 57 (NA)	86 (NA) (NA) (NA) (NA) (NA) (NA)
35891	Commercial cooking and food warming equipment -----	1982__ 609.0 1977__ 386.0 1972__ 217.0 1967__ 158.2 1963__ 107.0	27 31 27 24 23	42 46 44 40 35	68 71 69 64 59	93 93 90 90 86	327 (NA) (NA) (NA) (NA)
35892	Service industry machines and parts -----	1982__ 1 568.4 1977__ 1 059.2 1972__ 496.5 1967__ 305.3 1963__ 196.7	17 17 18 20 23	26 28 29 33 35	43 45 49 54 53	64 65 73 79 75	136 (NA) (NA) (NA) (NA) (NA)
35893	Commercial and industrial vacuum cleaners -----	1982__ 192.9 1977__ 109.4 1972__ 62.7 1967__ 26.0 1963__ 19.0 1958__ 12.7	47 51 49 45 40 43	61 67 67 71 62 66	88 89 92 98 93 96	100 99+ 100 100 100 100	1 017 (NA) (NA) (NA) (NA) (NA)
35890	Service industry machinery, n.e.c., n.s.k. -----	1982__ 180.1 1977__ 132.9 1972__ 88.2 1967__ 50.3 1963__ 18.9	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
3592-	Carburetors, pistons, rings, and valves <sup>11</sup> -----	1982__ 1 908.1 1977__ 1 298.5 1972__ 791.9	55 49 47	69 71 71	85 91 90	96 97 97	1 197 (NA) (NA)
35921	Carburetors, new and rebuilt <sup>11</sup> -----	1982__ 1 028.7 1977__ 642.0 1972__ 353.3	86 86 83	94 95 95	99 99+ 99	100 100 100	2 872 (NA) (NA)
35922	Pistons, piston rings, and piston pins (engine) <sup>11</sup> -----	1982__ 494.2 1977__ 372.2 1972__ 229.3	43 54 51	66 82 79	94 97 96	100 100 100	692 (NA) (NA)
35923	Valves (engine intake and exhaust) <sup>11</sup> -----	1982__ 325.1 1977__ 257.5 1972__ 196.6	86 88 85	96 95 93	99+ 98 98	100 100 100	2 294 (NA) (NA)
35920	Carburetors, pistons, rings, and valves, n.s.k. <sup>11</sup> -----	1982__ 60.1 1977__ 26.9 1972__ 12.7	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3599-	Machinery, except electrical, n.e.c. <sup>11</sup> -----	1982__ 11 697.8 1977__ 6 441.0 1972__ 3 363.3	3 2 2	4 3 3	7 6 6	11 10 11	4 (NA) (NA)
35994	Miscellaneous machinery products <sup>11</sup> -----	1982__ 1 582.4 1977__ 676.9 1972__ 442.5	7 12 12	12 20 17	21 35 31	32 52 49	31 (NA) (NA)
35995	Receipts for machine shop job work <sup>11</sup> -----	1982__ 5 594.5 1977__ 3 338.1 1972__ 1 425.8 1967__ 1 080.0	2 2 3 3	3 3 4 5	6 5 7 9	12 10 13 16	3 (NA) (NA) (NA)
35996	Hydraulic and pneumatic cylinders, except aerospace <sup>197</sup> -----	1982__ 552.9	21	33	56	79	220
35997	Hydraulic and pneumatic rotary actuators, accumulators, etc. <sup>197</sup> -----	1982__ 87.9	50	63	86	99	895
35998	Aerospace type hydraulic and pneumatic cylinders and related items <sup>197</sup> -----	1982__ 310.1	71	80	89	97	1 630
35999	Parts for hydraulic and pneumatic cylinders, etc. <sup>197</sup> -----	1982__ 144.9	48	61	78	95	891
35990	Machinery, except electrical, n.e.c., n.s.k. <sup>11</sup> -----	1982__ 3 425.1 1977__ 1 969.9 1972__ 1 305.8	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
36	ELECTRIC AND ELECTRONIC EQUIPMENT						
3612-	Transformers -----	1982.. 2 772.6	51	68	83	92	872
		1977.. 2 117.8	55	70	85	94	(NA)
		1972.. 1 436.7	58	74	89	96	(NA)
		1967.. 1 133.6	64	78	92	97	(NA)
		1963.. 692.2	65	78	90	97	(NA)
		1958.. 638.3	71	83	92	97	(NA)
36122	Power and distribution transformers -----	1982.. 1 554.0	72	87	96	99+	1 490
		1977.. 1 320.9	70	82	96	(D)	(NA)
		1972.. 914.2	67	86	97	(D)	(NA)
		1967.. 790.3	71	88	98	99+	(NA)
		1963.. 434.5	76	90	98	99+	(NA)
		1958.. 421.7	80	94	99	100	(NA)
		1954.. 441.1	85	97	99	(NA)	(NA)
36124	Fluorescent lamp ballasts <sup>11</sup> -----	1982.. 312.1	94	99	100	(X)	(D)
		1977.. 210.7	94	(D)	100	(X)	(NA)
		1972.. 160.6	96	(D)	100	(X)	(NA)
36125	Specialty transformers <sup>11</sup> -----	1982.. 545.1	47	63	85	98	695
		1977.. 342.8	49	70	90	99	(NA)
		1972.. 225.6	53	68	84	97	(NA)
36127	Other transformers, including parts for all transformers (1967 product class 36123) -----	1982.. 243.2	54	73	95	100	982
		1977.. 168.1	64	79	96	100	(NA)
		1972.. 111.4	80	91	98	100	(NA)
		1967.. 120.6	79	90	99	100	(NA)
		1963.. 90.3	66	81	93	99+	(NA)
		1958.. 81.0	81	87	94	99	(NA)
		1954.. 78.3	79	86	93	(NA)	(NA)
36120	Transformers, n.s.k. -----	1982.. 118.2	(X)	(X)	(X)	(X)	(X)
		1977.. 75.3	(X)	(X)	(X)	(X)	(NA)
		1972.. 24.9	(X)	(X)	(X)	(X)	(NA)
		1967.. 14.9	(X)	(X)	(X)	(X)	(NA)
		1963.. 4.4	(X)	(X)	(X)	(X)	(NA)
		1958.. 5.6	(X)	(X)	(X)	(X)	(NA)
3613-	Switchgear and switchboard apparatus -----	1982.. 4 760.6	43	56	71	83	559
		1977.. 3 298.4	47	61	75	85	(NA)
		1972.. 2 055.5	50	64	76	86	(NA)
		1967.. 1 598.7	48	62	74	86	(NA)
		1963.. 1 008.5	48	61	74	85	(NA)
		1958.. 891.4	53	65	76	86	(NA)
36132	Power circuit breakers, all voltages -----	1982.. 394.6	77	88	97	100	1 797
		1977.. 261.2	91	95	99	100	(NA)
		1972.. 183.2	86	94	99+	100	(NA)
		1967.. 209.8	81	95	99+	100	(NA)
36133	Low voltage panelboards and distribution boards -----	1982.. 1 299.5	55	71	83	92	978
		1977.. 878.2	57	74	88	95	(NA)
		1972.. 536.9	60	68	79	88	(NA)
		1967.. 378.0	57	69	79	89	(NA)
		1963.. 304.2	46	61	75	87	(NA)
		1958.. 224.2	43	55	71	87	(NA)
36134	Fuses and fuse equipment, less than 2300 volts -----	1982.. 280.6	83	93	99	100	2 704
		1977.. 201.6	83	94	99+	100	(NA)
		1972.. 101.1	83	94	99+	100	(NA)
		1967.. 69.2	80	91	99+	100	(NA)
		1963.. 41.9	78	89	99	100	(NA)
		1958.. 30.7	75	86	98	100	(NA)
		1954.. 26.8	63	79	94	(NA)	(NA)
36135	Molded case circuit breakers, 750 volts or less -----	1982.. 711.1	75	91	99+	100	1 812
		1977.. 492.0	73	87	99+	100	(NA)
		1972.. 285.5	72	93	99+	100	(NA)
		1967.. 170.2	66	91	99+	100	(NA)
36136	Duct, including plug-in units, 750 volts or less -----	1982.. 162.5	80	90	99	100	1 692
		1977.. 88.5	71	90	99+	100	(NA)
		1972.. 71.6	67	90	99+	100	(NA)
		1967.. 62.8	79	93	99+	100	(NA)
36138	Relays, switchgear <sup>198</sup> -----	1982.. 497.1	38	55	85	99	553
36139	Switchgear, except ducts and relays <sup>199</sup> -----	1982.. 1 230.5	40	54	75	90	528
36130	Switchgear and switchboard apparatus, n.s.k. -----	1982.. 184.8	(X)	(X)	(X)	(X)	(X)
		1977.. 179.3	(X)	(X)	(X)	(X)	(NA)
		1972.. 68.1	(X)	(X)	(X)	(X)	(NA)
		1967.. 59.3	(X)	(X)	(X)	(X)	(NA)
		1963.. 16.3	(X)	(X)	(X)	(X)	(NA)
		1958.. 15.6	(X)	(X)	(X)	(X)	(NA)
3621-	Motors and generators -----	1982.. 6 724.6	36	52	67	82	469
		1977.. 4 976.2	39	53	70	84	(NA)
		1972.. 2 626.6	45	57	73	86	(NA)
		1967.. 2 319.0	44	56	69	85	(NA)
		1963.. 1 578.2	47	56	69	85	(NA)
		1958.. 1 291.4	48	57	71	85	(NA)

See footnotes at end of table.



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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.						
3621-	Motors and generators—Con.						
	1954..	1 338.5	48	56	70	(NA)	(NA)
36211	Fractional horsepower motors -----	1982.. 2 518.7	42	52	73	91	608
	1977.. 1 956.3	46	59	79	94	(NA)	(NA)
	1972.. 1 144.0	47	60	79	93	(NA)	(NA)
	1967.. 842.5	45	57	74	93	(NA)	(NA)
	1963.. 620.3	46	57	77	94	(NA)	(NA)
	1958.. 435.8	51	61	77	97	(NA)	(NA)
36212	Integral horsepower motors and generators -----	1982.. 1 454.2	53	70	91	99	859
	1977.. 1 163.0	52	70	93	99+	(NA)	(NA)
	1972.. 561.4	59	75	92	99+	(NA)	(NA)
	1967.. 569.5	53	78	92	99+	(NA)	(NA)
	1963.. 380.2	57	73	88	99	(NA)	(NA)
	1958.. 430.5	60	74	90	99	(NA)	(NA)
	1954.. 410.6	61	77	92	(NA)	(NA)	(NA)
36213	Land transportation motors and generators -----	1982.. 460.2	85	93	99+	100	2 812
	1977.. 205.7	78	92	99	100	(NA)	(NA)
	1972.. 106.3	79	92	100	(X)	(NA)	(NA)
	1967.. 133.4	85	95	99+	100	(NA)	(NA)
	1963.. 89.8	83	93	99+	100	(NA)	(NA)
	1958.. 52.4	88	93	99	100	(NA)	(NA)
	1954.. 81.4	80	90	98	(NA)	(NA)	(NA)
36214	Prime mover generator sets -----	1982.. 961.5	58	75	94	100	1 424
	1977.. 643.9	56	76	94	100	(NA)	(NA)
	1972.. 247.3	59	74	96	100	(NA)	(NA)
	1967.. 232.7	49	75	95	100	(NA)	(NA)
	1963.. 104.6	45	65	88	100	(NA)	(NA)
	1958.. 73.9	50	70	94	100	(NA)	(NA)
	1954.. 96.3	35	55	87	(NA)	(NA)	(NA)
36217	Motor generator sets, fractional <sup>11</sup> -----	1982.. 264.5	54	73	96	100	1 114
	1977.. 274.5	60	73	94	100	(NA)	(NA)
	1972.. 219.0	77	88	97	100	(NA)	(NA)
36218	Motor generator sets, integral <sup>11</sup> -----	1982.. 379.3	52	69	96	100	1 078
	1977.. 288.1	64	77	95	100	(NA)	(NA)
	1972.. 122.9	76	92	99	100	(NA)	(NA)
	1967.. 345.6	51	69	87	99+	(NA)	(NA)
	1963.. 246.2	52	67	86	98	(NA)	(NA)
	1958.. 164.1	57	69	87	98	(NA)	(NA)
36219	Parts for motors and generators (1967 product class 36216)-----	1982.. 510.6	48	66	85	97	822
	1977.. 354.0	45	63	84	97	(NA)	(NA)
	1972.. 188.6	39	62	85	98	(NA)	(NA)
	1967.. 158.8	41	57	81	97	(NA)	(NA)
	1963.. 127.6	38	51	73	92	(NA)	(NA)
	1958.. 108.9	46	56	74	90	(NA)	(NA)
	1954.. 88.8	34	49	75	(NA)	(NA)	(NA)
36210	Motors and generators, n.s.k. -----	1982.. 175.6	(X)	(X)	(X)	(X)	(X)
	1977.. 90.7	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972.. 36.5	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967.. 36.6	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963.. 9.4	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958.. 25.9	(X)	(X)	(X)	(X)	(NA)	(NA)
3622-	Industrial controls (1977 product class 36220) -----	1982.. 4 376.1	35	48	60	70	414
	1977.. 2 429.1	39	51	63	75	(NA)	(NA)
	1972.. 1 295.4	40	55	65	78	(NA)	(NA)
	1967.. 1 071.4	44	56	68	81	(NA)	(NA)
	1963.. 633.3	49	62	74	84	(NA)	(NA)
	1958.. 447.3	54	68	80	90	(NA)	(NA)
36221	Specific purpose industrial controls <sup>200</sup> -----	1982.. 1 406.7	43	55	67	80	602
36222	General purpose industrial controls <sup>200</sup> -----	1982.. 2 171.8	42	55	70	84	534
36223	Parts for industrial controls <sup>200</sup> -----	1982.. 344.5	54	72	87	96	985
36220	Industrial controls, n.s.k. <sup>200</sup> -----	1982.. 453.1	(X)	(X)	(X)	(X)	(X)
3623-	Welding apparatus, electric -----	1982.. 1 231.6	45	59	74	89	731
	1977.. 1 035.0	48	62	78	92	(NA)	(NA)
	1972.. 573.7	38	54	71	90	(NA)	(NA)
	1967.. 432.9	36	50	73	89	(NA)	(NA)
	1963.. 324.9	36	51	74	92	(NA)	(NA)
	1958.. 233.2	37	50	74	92	(NA)	(NA)
	1954.. 160.0	37	50	73	(NA)	(NA)	(NA)
36231	Arc welding machines, components, and accessories -----	1982.. 511.6	58	74	88	99	1 181
	1977.. 407.8	66	78	92	99+	(NA)	(NA)
	1972.. 218.5	56	66	85	99	(NA)	(NA)
	1967.. 140.7	61	77	90	99+	(NA)	(NA)
	1963.. 104.5	61	72	89	99	(NA)	(NA)
	1958.. 65.8	54	74	90	99	(NA)	(NA)
	1954.. 36.7	59	78	94	(NA)	(NA)	(NA)
36232	Arc welding electrodes, metal -----	1982.. 469.6	65	85	99	100	1 552
	1977.. 447.6	66	87	99	100	(NA)	(NA)
	1972.. 220.1	61	86	99+	100	(NA)	(NA)
	1967.. 166.3	60	85	99+	100	(NA)	(NA)
	1963.. 148.2	51	73	99	100	(NA)	(NA)
	1958.. 116.4	54	73	99	100	(NA)	(NA)
	1954.. 72.3	62	79	98	(NA)	(NA)	(NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
36	<b>ELECTRIC AND ELECTRONIC EQUIPMENT—Con.</b>							
3623- 36233	<b>Welding apparatus, electric—Con.</b> Resistance welders, components, accessories -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	187.8 136.9 114.1 88.0 68.3 47.8 51.1	30 28 29 38 35 31 35	49 49 50 53 53 54 60	82 85 82 80 80 86 87	99+ 100 99+ 99+ 99 99 (NA)	448 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
36230	Welding apparatus, electric, n.s.k. -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	62.7 42.7 20.9 37.9 3.8 3.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3624-	<b>Carbon and graphite products (1967 product class 36240) ----</b>	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	900.9 663.0 335.8 295.8 217.8 156.8 114.5	68 76 79 84 82 84 82	77 84 89 91 89 89 89	92 95 97 96 96 96 95	99 99+ 99+ 98 99+ 100 (NA)	1 457 (NA) (NA) (NA) (NA) (NA) (NA)
36241	Electrodes -----	1982-- 1977-- 1972--	440.5 362.0 136.9	93 94 (D)	100 (D) (D)	(D) 100 100	(X) (X) (X)	2 775 (NA) (NA)
36249	Carbon and graphite products, n.e.c. -----	1982-- 1977-- 1972--	433.6 293.1 193.8	52 66 73	67 78 85	90 95 97	99+ 100 100	912 (NA) (NA)
36240	Carbon and graphite products, n.s.k. -----	1982-- 1977-- 1972--	26.8 7.9 5.1	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3629-	<b>Electrical industrial apparatus, n.e.c. -----</b>	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	1 003.1 699.6 441.8 398.5 250.5 213.1	21 32 28 35 31 31	35 44 41 48 43 43	58 61 58 67 58 62	79 81 78 89 76 80	225 (NA) (NA) (NA) (NA) (NA) (NA)
36291	Capacitors for industrial use -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	190.0 154.8 112.4 112.5 51.4 57.1 64.2	77 78 78 65 85 67 72	93 95 97 85 98 86 88	100 100 100 99+ (D) 99 99	(X) (X) (X) 100 (D) 100 (NA)	1 589 (NA) (NA) (NA) (NA) (NA) (NA)
36292	Rectifying apparatus -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	524.8 310.2 151.5 131.6 86.9 73.1	32 35 41 48 35 45	48 52 56 62 52 62	76 76 80 82 80 86	96 98 97 98 98 98	425 (NA) (NA) (NA) (NA) (NA) (NA)
36293	Electrical equipment for industrial use, n.e.c. -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	213.0 182.2 146.0 135.1 103.1 77.1	40 44 32 26 32 31	54 60 45 40 43 46	76 81 69 67 60 65	97 99 89 93 81 83	645 (NA) (NA) (NA) (NA) (NA) (NA)
36290	Electrical industrial apparatus, n.e.c., n.s.k. -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	75.3 51.9 31.9 19.4 8.5 5.8	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
3631-	<b>Household cooking equipment -----</b>	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	2 346.3 1 806.5 1 034.7 630.1 536.7 433.1	43 44 46 46 45 42	64 66 65 64 62 56	89 86 84 84 81 75	99 98 98 97 96 95	712 (NA) (NA) (NA) (NA) (NA) (NA)
36311	Electric ranges, ovens, and surface units -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958--	1 543.2 1 232.5 582.8 338.8 282.1 203.7	54 57 60 66 70 67	78 79 80 81 83 81	99 98 95 94 95 97	100 100 100 100 (D) 100	1 190 (NA) (NA) (NA) (NA) (NA) (NA)
36313	Gas household ranges, ovens, and surface cooking units <sup>11</sup> -----	1982-- 1977--	418.8 349.1	67 59	88 82	(D) 98	(D) 100	1 304 (NA)
36314	Other household ranges and cooking equipment <sup>11</sup> -----	1982-- 1977--	370.6 203.5	59 48	81 73	97 98	100 100	1 068 (NA)
36310	Household cooking equipment, n.s.k. -----	1982-- 1977-- 1972-- 1967-- 1963--	13.7 21.4 4.9 2.1 1.1	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
3632-	<b>Household refrigerators and freezers -----</b>	1982-- 1977--	2 201.7 2 005.6	90 82	97 97	99+ 99+	100 100	2 253 (NA)

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.						
3632-	Household refrigerators and freezers—Con.						
	1972... 1 419.4	75	96	99+	100	(NA)	
	1967... 987.6	69	89	99+	100	(NA)	
	1963... 831.8	73	89	99+	100	(NA)	
	1958... 729.2	65	85	99	100	(NA)	
36321	Household refrigerators <sup>201</sup> -----	1982... 1 786.9	90	99	100	(X)	2 353
	1977... 1 644.4	83	(D)	100	(X)	(NA)	
	1972... 1 207.8	76	97	(D)	100	(NA)	
	1967... 841.0	70	92	99+	100	(NA)	
	1963... 687.9	76	93	99+	100	(NA)	
	1958... 551.2	73	91	99	100	(NA)	
	1954... 573.1	62	83	99	(NA)	(NA)	
36322	Food freezers, household <sup>201</sup> -----	1982... 311.2	96	(D)	(D)	(X)	(D)
	1977... 296.0	83	(D)	100	(X)	(NA)	
	1972... 199.8	80	96	100	(X)	(NA)	
	1967... 142.8	70	89	100	(X)	(NA)	
	1963... 143.1	63	82	(D)	(D)	(NA)	
	1958... 178.0	58	78	99	100	(NA)	
	1954... 172.4	44	66	93	(NA)	(NA)	
36323	Parts for refrigerators and freezers <sup>201</sup> -----	1982... 92.0	80	96	100	(X)	2 013
	1977... 61.8	(D)	100	(X)	(X)	(NA)	
36320	Household refrigerators and freezers, n.s.k. -----	1982... 11.6	(X)	(X)	(X)	(X)	(X)
	1977... 3.4	(X)	(X)	(X)	(X)	(NA)	
	1972... 11.8	(X)	(X)	(X)	(X)	(NA)	
	1967... 3.8	(X)	(X)	(X)	(X)	(NA)	
	1963... .8	(X)	(X)	(X)	(X)	(NA)	
3633-	Household laundry equipment <sup>202</sup> -----	1982... 1 800.2	90	(D)	(D)	(X)	(D)
	1977... 1 697.3	83	97	99+	100	(NA)	
	1972... 1 287.3	76	95	99	100	(NA)	
	1967... 931.7	74	92	99+	100	(NA)	
	1963... 766.1	71	90	99	100	(NA)	
	1958... 719.6	67	87	97	99	(NA)	
	1954... 596.3	58	81	97	(NA)	(NA)	
36331	Household washing machines and dryers -----	1982... 1 515.6	93	(D)	(X)	(X)	(D)
	1977... 1 460.3	85	99	100	(X)	(NA)	
	1972... 1 138.5	79	98	100	(X)	(NA)	
	1967... 843.2	77	94	100	(X)	(NA)	
	1963... 698.8	73	93	(D)	(D)	(NA)	
	1958... 672.2	68	90	99	100	(NA)	
36333	Household laundry equipment, n.e.c. <sup>202</sup> -----	1982... 281.1	85	95	100	(X)	(D)
	1977... 235.9	80	91	99	100	(NA)	
	1972... 148.7	71	88	98	100	(NA)	
36330	Household laundry equipment, n.s.k. -----	1982... 3.4	(X)	(X)	(X)	(X)	(X)
	1977... 1.1	(X)	(X)	(X)	(X)	(NA)	
	1972... 2.7	(X)	(X)	(X)	(X)	(NA)	
	1967... 4.7	(X)	(X)	(X)	(X)	(NA)	
	1963... .5	(X)	(X)	(X)	(X)	(NA)	
	1958... .9	(X)	(X)	(X)	(X)	(NA)	
3634-	Electric housewares and fans -----	1982... 2 845.6	34	50	74	92	467
	1977... 2 304.0	39	53	73	90	(NA)	
	1972... 1 449.1	39	54	70	87	(NA)	
	1967... 1 065.7	44	56	73	89	(NA)	
	1963... 800.5	35	49	70	87	(NA)	
	1958... 543.8	39	53	71	87	(NA)	
36341	Electric fans, except industrial type -----	1982... 592.3	54	80	97	100	1 004
	1977... 257.0	53	71	93	100	(NA)	
	1972... 127.7	52	71	96	100	(NA)	
	1967... 123.6	47	67	92	100	(NA)	
	1963... 102.1	44	65	91	100	(NA)	
	1958... 77.1	54	75	93	(D)	(NA)	
	1954... 88.4	46	70	92	(NA)	(NA)	
36345	Small electric household appliances <sup>11</sup> -----	1982... 1 977.3	42	59	82	96	626
	1977... 1 846.2	43	59	80	96	(NA)	
36349	Parts for small appliances (1972 product class 36344) -----	1982... 210.6	61	77	98	100	1 723
	1977... 148.4	47	65	90	100	(NA)	
	1972... 84.8	51	68	92	100	(NA)	
	1967... 64.4	59	74	91	100	(NA)	
	1963... 81.5	60	75	92	99	(NA)	
	1958... 55.9	60	80	96	100	(NA)	
36340	Electric housewares and fans, n.s.k. -----	1982... 65.4	(X)	(X)	(X)	(X)	(X)
	1977... 52.4	(X)	(X)	(X)	(X)	(NA)	
	1972... 49.6	(X)	(X)	(X)	(X)	(NA)	
	1967... 21.5	(X)	(X)	(X)	(X)	(NA)	
	1963... 10.4	(X)	(X)	(X)	(X)	(NA)	
	1958... 20.6	(X)	(X)	(X)	(X)	(NA)	
36350	Household vacuum cleaners -----	1982... 905.8	68	88	99	100	1 425
	1977... 710.4	69	88	99	100	(NA)	
	1972... 438.3	66	86	98	100	(NA)	
	1967... 254.5	62	84	99	100	(NA)	
	1963... 183.1	64	84	98	100	(NA)	
	1958... 155.6	64	84	99	100	(NA)	
3636-	Sewing machines (1972 product class 36360) -----	1982... 231.0	66	77	90	98	1 703
	1977... 260.4	82	89	94	99	(NA)	
	1972... 152.1	80	88	95	99	(NA)	
	1967... 116.8	80	88	96	99+	(NA)	

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.						
3636-	Sewing machines (1972 product class 36360)—Con.						
	1963... 104.7 82 91 96 99 (NA)						
	1958... 97.7 (D) 92 97 99 (NA)						
	1954... 107.5 76 89 95 (NA)						
36361	Household sewing machines and parts ----- 1982... (203) (203) (203) (203) (203) (D) (NA)						
36362	Industrial sewing machines ----- 1982... 203208.2 73 85 99 100 2 097						
	1977... 203237.5 90 96 100 (X) (NA)						
36360	Sewing machines, n.s.k. ----- 1982... 22.8 (X) (X) (X) (X) (X) (X) (X)						
	1977... 22.9 (X) (X) (X) (X) (X) (X) (X)						
3639-	Household appliances, n.e.c. ----- 1982... 1 541.0 47 73 92 99 803						
	1977... 1 383.0 46 72 94 99 (NA)						
	1972... 816.5 45 63 90 98 (NA)						
	1967... 509.7 39 55 82 97 (NA)						
	1963... 415.7 37 51 75 92 (NA)						
	1958... 351.7 32 46 68 91 (NA)						
36391	Household water heaters, electric ----- 1982... 300.8 79 95 100 (X) 1 823						
	1977... 222.5 78 98 100 (X) (NA)						
	1972... 119.9 62 88 (D) 100 (NA)						
	1967... 63.4 48 69 97 100 (NA)						
	1963... 61.4 40 61 88 99+ (NA)						
	1958... 56.8 37 52 79 (D) (NA)						
	1954... 48.2 39 55 78 (NA) (NA)						
36392	Household water heaters, except electric ----- 1982... 390.5 85 99 100 (X) 2 049						
	1977... 281.6 81 99 100 (X) (NA)						
	1972... 179.5 67 90 99 100 (NA)						
	1967... 130.1 54 81 98 100 (NA)						
	1963... 143.3 51 69 92 99+ (NA)						
	1958... 163.8 42 56 83 99 (NA)						
	1954... 138.4 40 57 80 (NA) (NA)						
36394	Dishwashers, food waste disposers, trash compactors, floor waxers, and polishers <sup>11</sup> ----- 1982... 687.4 69 92 99+ (D) 1 423						
	1977... 721.8 73 90 99+ 100 (NA)						
36399	Household appliances, n.e.c. <sup>11</sup> ----- 1982... 140.7 66 80 96 100 2 073						
	1977... 139.8 72 87 99+ 100 (NA)						
36390	Household appliances, n.e.c., n.s.k. ----- 1982... 21.6 (X) (X) (X) (X) (X) (X) (X)						
	1977... 17.3 (X) (X) (X) (X) (X) (X) (X)						
	1972... 12.8 (X) (X) (X) (X) (X) (X) (X)						
	1967... 18.2 (X) (X) (X) (X) (X) (X) (X)						
	1963... 2.9 (X) (X) (X) (X) (X) (X) (X)						
36410	Electric lamps (bulbs only) ----- 1982... 2 025.9 90 96 98 99 2 954						
	1977... 1 630.2 89 94 97 99 (NA)						
	1972... 1 068.9 87 93 98 99+ (NA)						
	1967... 756.4 88 93 98 99+ (NA)						
	1963... 545.9 89 95 99 99+ (NA)						
	1958... 393.6 90 96 99 99+ (NA)						
	1954... 309.7 93 96 99 (NA) (NA)						
3643-	Current-carrying wiring devices (1977 product class 36430) --- 1982... 2 761.4 21 33 51 72 194						
	1977... 1 824.9 23 33 52 76 (NA)						
	1972... 1 213.4 26 40 57 77 (NA)						
	1967... 789.8 21 32 51 73 (NA)						
	1963... 561.8 26 38 57 75 (NA)						
36431	Lampholders <sup>204</sup> ----- 1982... 154.7 70 83 98 100 2 463						
36432	Convenience and power outlets <sup>204</sup> ----- 1982... 169.5 61 86 99+ (D) 1 300						
36433	Switches for electrical circuitry <sup>204</sup> ----- 1982... 965.5 38 54 77 95 564						
36434	Metal contacts <sup>204</sup> ----- 1982... 164.3 55 79 99 100 1 023						
36435	Wire connectors for electrical circuitry <sup>204</sup> ----- 1982... 591.6 41 60 86 98 654						
36436	Current-carrying wiring devices, n.e.c. <sup>204</sup> ----- 1982... 569.5 29 43 68 94 374						
36430	Current-carrying wiring devices, n.s.k. <sup>204</sup> ----- 1982... 146.3 (X) (X) (X) (X) (X)						
3644-	Noncurrent-carrying wiring devices ----- 1982... 2 082.3 23 36 61 85 260						
	1977... 1 315.5 17 30 55 82 (NA)						
	1972... 831.2 17 31 55 82 (NA)						
	1967... 548.6 17 29 53 81 (NA)						
	1963... 439.3 18 31 56 81 (NA)						
	1958... 341.6 26 41 67 88 (NA)						
36441	Pole and transmission line hardware ----- 1982... 415.5 52 79 96 100 914						
	1977... 276.2 52 75 95 100 (NA)						
	1972... 222.3 53 71 93 100 (NA)						
	1967... 130.2 39 60 93 100 (NA)						
	1963... 97.9 40 67 96 100 (NA)						
	1958... 81.2 51 75 98 100 (NA)						
	1954... 70.9 49 71 93 (NA) (NA)						
36442	Electrical conduit and conduit fittings ----- 1982... 1 021.3 38 54 79 97 558						
	1977... 634.4 31 47 76 98 (NA)						
	1972... 371.9 29 45 75 97 (NA)						
	1967... 306.9 26 43 74 96 (NA)						
	1963... 242.2 27 43 70 92 (NA)						
	1958... 201.3 41 59 82 95 (NA)						

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.						
3644-	Noncurrent-carrying wiring devices—Con.						
36443	Noncurrent-carrying wiring devices, n.e.c. ----- 1982--	574.6	37	56	81	97	516
	1977--	342.7	37	57	82	99	(NA)
	1972--	216.2	34	58	83	98	(NA)
	1967--	98.6	43	63	84	(NA)	(NA)
	1963--	92.8	44	61	79	94	(NA)
	1958--	59.1	54	69	86	98	(NA)
36440	Noncurrent-carrying wiring devices, n.s.k. ----- 1982--	70.9	(X)	(X)	(X)	(X)	(X)
	1977--	62.2	(X)	(X)	(X)	(X)	(NA)
	1972--	20.8	(X)	(X)	(X)	(X)	(NA)
	1967--	12.8	(X)	(X)	(X)	(X)	(NA)
	1963--	6.4	(X)	(X)	(X)	(X)	(NA)
3645-	Residential lighting fixtures <sup>11</sup> ----- 1982--	1 289.7	15	23	37	55	117
	1977--	974.6	22	30	42	58	(NA)
	1972--	738.3	25	32	44	57	(NA)
36451	Residential lighting fixtures, except portable (1967 product class 36421) ----- 1982--	469.8	29	44	64	88	347
	1977--	461.0	35	48	67	90	(NA)
	1972--	291.9	46	58	75	92	(NA)
	1967--	190.5	36	53	71	(NA)	(NA)
	1963--	158.8	30	47	64	82	(NA)
36457	Portable residential type lighting fixtures <sup>11</sup> ----- 1982--	628.9	18	29	47	73	164
	1977--	389.6	22	31	46	71	(NA)
	<sup>205</sup> 1972--	320.8	19	29	45	66	(NA)
36450	Residential lighting fixtures, n.s.k. <sup>206</sup> ----- 1982--	191.0	(X)	(X)	(X)	(X)	(X)
	1977--	124.0	(X)	(X)	(X)	(X)	(NA)
	1972--	133.9	(X)	(X)	(X)	(X)	(NA)
	1967--	91.0	(X)	(X)	(X)	(X)	(NA)
	1963--	44.9	(X)	(X)	(X)	(X)	(NA)
	1958--	56.4	(X)	(X)	(X)	(X)	(NA)
3646-	Commercial lighting fixtures <sup>11</sup> ----- 1982--	1 720.8	30	45	65	81	399
	1977--	935.0	27	40	64	83	(NA)
	1972--	700.3	24	38	59	81	(NA)
36462	Commercial and institutional lighting fixtures (1967 product class 36422) ----- 1982--	1 279.2	36	53	73	89	529
	1977--	653.6	31	47	69	89	(NA)
	1972--	525.7	28	42	66	87	(NA)
	1967--	385.4	24	35	54	78	(NA)
	1963--	299.2	22	34	56	77	(NA)
	1958--	168.1	17	28	51	75	(NA)
36463	Industrial type lighting fixtures <sup>11</sup> ----- 1982--	361.8	36	51	77	96	483
	1977--	243.0	37	55	77	97	(NA)
	1972--	162.6	26	42	68	91	(NA)
36460	Commercial lighting fixtures, n.s.k. <sup>206</sup> ----- 1982--	79.8	(X)	(X)	(X)	(X)	(X)
	1977--	38.4	(X)	(X)	(X)	(X)	(NA)
	1972--	12.0	(X)	(X)	(X)	(X)	(NA)
36470	Vehicular lighting equipment <sup>206</sup> ----- 1982--	668.3	60	69	85	97	1 554
	1977--	646.1	69	77	89	99	(NA)
	1972--	359.2	68	80	92	99+	(NA)
	1967--	226.1	66	77	91	98	(NA)
	1963--	157.4	71	84	96	100	(NA)
	1958--	106.0	69	79	94	99	(NA)
3648-	Lighting equipment, n.e.c. <sup>11</sup> ----- 1982--	1 170.3	23	36	55	75	231
	1977--	674.7	22	34	55	76	(NA)
	1972--	487.4	24	37	64	83	(NA)
36485	Outdoor lighting equipment (1967 product class 36425) ----- 1982--	706.5	38	55	78	96	514
	1977--	392.0	33	48	76	95	(NA)
	1972--	315.9	36	55	85	97	(NA)
	1967--	199.2	40	58	80	95	(NA)
	1963--	134.8	40	55	80	95	(NA)
	1958--	76.3	41	62	84	99	(NA)
36489	Lighting equipment, n.e.c. <sup>207</sup> ----- 1982--	383.0	29	42	64	87	365
	1977--	222.4	39	50	68	90	(NA)
	1972--	164.7	35	47	67	87	(NA)
	1967--	122.6	27	40	65	89	(NA)
	1963--	84.7	24	33	51	75	(NA)
	1958--	68.9	31	43	61	84	(NA)
36480	Lighting equipment, n.e.c., n.s.k. <sup>206</sup> ----- 1982--	80.8	(X)	(X)	(X)	(X)	(X)
	1977--	60.3	(X)	(X)	(X)	(X)	(NA)
	1972--	6.8	(X)	(X)	(X)	(X)	(NA)
3651-	Radio and TV receiving sets ----- 1982--	5 415.1	47	67	83	92	686
	1977--	4 730.6	44	60	70	90	(NA)
	1972--	3 625.6	46	69	85	94	(NA)
	1967--	3 568.2	50	69	85	94	(NA)

See footnotes at end of table.

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>				Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies		50 largest companies
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.						
3651-	Radio and TV receiving sets—Con.						
	1963...	2 070.8	43	63	82	93	(NA)
36511	Home, portable, and automobile radios -----	1982... 783.4	77	89	100	(X)	(D)
	1977... 811.6	75	90	99+	100	(NA)	
	1972... 779.2	57	76	96	100	(NA)	
	1967... 697.4	48	72	95	99+	(NA)	
	1963... 531.3	51	74	92	99+	(NA)	
	1958... 344.9	(NA)	(NA)	(NA)	(NA)	(NA)	
36512	Television receivers -----	1982... 3 386.0	67	90	100	(X)	1 351
	1977... 2 450.9	70	93	100	(X)	(NA)	
	1972... 2 148.7	66	93	100	(X)	(NA)	
	1967... 2 259.7	64	86	99	100	(NA)	
	1963... 1 092.3	58	81	99+	100	(NA)	
	1958... 726.6	55	81	99	100	(NA)	
36514	Consumer high fidelity components -----	1982... 312.0	35	54	80	98	527
	1977... 558.3	37	55	81	99	(NA)	
	1972... 363.1	36	51	78	98	(NA)	
	1967... 396.1	28	42	75	98	(NA)	
36515	Speaker systems, microphones, etc. -----	1982... 783.9	36	53	75	91	480
	1977... 753.9	31	47	69	91	(NA)	
	1972... 251.1	26	46	75	94	(NA)	
	1967... 184.8	24	38	65	(NA)	(NA)	
36510	Radio and TV receiving sets, n.s.k.-----	1982... 149.8	(X)	(X)	(X)	(X)	(X)
	1977... 156.1	(X)	(X)	(X)	(X)	(NA)	
	1972... 83.6	(X)	(X)	(X)	(X)	(NA)	
	1967... 30.2	(X)	(X)	(X)	(X)	(NA)	
	1963... 16.1	(X)	(X)	(X)	(X)	(NA)	
	1958... .6	(X)	(X)	(X)	(X)	(NA)	
3652-	Phonograph records and prerecorded tape -----	1982... 1 695.0	58	70	80	86	1 060
	1977... 1 138.7	60	75	90	96	(NA)	
	1972... 537.1	47	60	75	85	(NA)	
	1967... 271.0	58	67	80	91	(NA)	
	1963... 178.7	68	74	83	93	(NA)	
	1958... 136.2	74	81	88	97	(NA)	
	1954... 80.2	69	78	86	(X)	(NA)	
36521	Records, record blanks, prerecorded audio tapes, and video discs <sup>208</sup> -----	1982... 1 259.2	76	85	91	97	1 837
36522	Magnetic tapes and discs with computer or word processor programs <sup>208</sup> -----	1982... 207.6	99	(D)	(D)	(X)	2 710
36520	Phonograph records and prerecorded tapes, n.s.k. <sup>208</sup> -----	1982... 228.2	(X)	(X)	(X)	(X)	(X)
3661-	Telephone and telegraph apparatus-----	1982... 11 886.9	74	81	90	96	(D)
	1977... 7 118.1	(D)	89	93	98	(NA)	
	1972... 3 940.1	(D)	(D)	97	99	(NA)	
	1967... 2 248.2	(D)	94	98	99+	(NA)	
	1963... 1 538.0	(D)	(D)	99	99+	(NA)	
36611	Telephone switching and switchboard equipment -----	1982... 4 569.4	80	91	97	99+	2 690
	1977... 2 827.1	(D)	97	99+	100	(NA)	
	1972... 1 582.3	(D)	99+	100	(X)	(NA)	
	1967... 840.4	(D)	99+	100	(X)	(NA)	
	1963... 491.3	(D)	99+	100	(X)	(NA)	
	1958... 434.7	(D)	100	(X)	(X)	(NA)	
36612	Telephone and telegraph (wire) apparatus -----	1982... 7 078.9	(D)	(D)	92	98	(D)
	1977... 4 174.5	(D)	87	93	99	(NA)	
	1972... 2 328.8	(D)	(D)	(D)	99+	(NA)	
	1967... 1 399.0	(D)	(D)	98	99+	(NA)	
	1963... 1 045.2	(D)	(D)	(D)	100	(NA)	
36610	Telephone and telegraph apparatus, n.s.k. -----	1982... 238.6	(X)	(X)	(X)	(X)	(X)
	1977... 117.2	(X)	(X)	(X)	(X)	(NA)	
	1972... 29.0	(X)	(X)	(X)	(X)	(NA)	
	1967... 8.8	(X)	(X)	(X)	(X)	(NA)	
	1963... 1.5	(X)	(X)	(X)	(X)	(NA)	
	1958... 7.0	(X)	(X)	(X)	(X)	(NA)	
3662-	Radio and TV communication equipment -----	1982... 32 217.1	21	34	56	73	217
	1977... 14 051.0	20	32	54	72	(NA)	
	1972... 8 382.2	19	33	56	75	(NA)	
	1967... 7 455.1	21	36	59	76	(NA)	
36621	Communication equipment, except broadcast <sup>11</sup> -----	1982... 6 995.7	38	50	66	81	475
	1977... 3 344.4	40	51	66	80	(NA)	
36622	Broadcast, studio, and related equipment <sup>11</sup> -----	1982... 1 591.4	37	51	67	85	439
	1977... 568.4	38	51	70	91	(NA)	
36624	Alarm systems <sup>209</sup> -----	1982... 827.9	35	48	67	89	551
36625	Search and detection, navigation, and guidance equipment <sup>11</sup> -----	1982... 18 092.3	31	46	72	91	400
	1977... 7 478.1	25	45	72	92	(NA)	
36626	Traffic control equipment <sup>209</sup> -----	1982... 418.3	63	76	95	100	1 380
36628	Intercommunication equipment <sup>209</sup> -----	1982... 163.8	41	58	85	99+	609
36629	Electronic systems and equipment, n.e.c. (1977 product class 36627) <sup>11</sup> -----	1982... 3 021.9	32	40	57	75	423
	1977... 1 348.6	24	35	53	72	(NA)	

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.						
3662- 36620	Radio and TV communication equipment—Con. Radio and TV communication equipment, n.s.k. -----	1982... 1 105.7 1977... 509.7 1972... 209.3 1967... 196.9 1963... 32.0	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
3671-	Electron tubes <sup>210</sup> -----	1982... 1 854.2 1977... 1 257.4	51 57	72 74	93 93	99 99	882 (NA)
36711	Receiving tubes, except cathode ray (1972 product class 36710) ----	1982... 44.8 1977... 104.0 1972... 189.6 1967... 253.1 1963... 287.9 1958... 337.3 1954... 288.8	(D) (D) 90 89 83 76 79	(D) (D) 98 97 98 94 97	(X) 100 99+ 99+ 99+ 99 100	(X) (X) 100 100 100 99+ (X)	(D) (NA) (NA) (NA) (NA) (NA) (NA) (NA)
36712	Cathode ray picture tubes (1972 product class 36720) -----	1982... 828.2 1977... 603.5 1972... 633.6 1967... 756.6 1963... 248.5 1958... 177.3 1954... 213.0	90 92 82 84 81 64 58	99 98 96 97 94 85 79	100 99 99 99+ 97 96 98	(X) 99+ 99+ 100 99 99 (NA)	2 458 (NA) (NA) (NA) (NA) (NA) (NA)
36713	Transmittal and special purpose tubes (1972 product class 36730) -----	1982... 962.1 1977... 544.6 1972... 364.7 1967... 361.6 1963... 286.7 1958... 224.9	47 41 50 54 44 52	66 61 70 73 68 69	94 92 95 93 92 94	100 100 99+ 99+ 99+ (D)	917 (NA) (NA) (NA) (NA) (NA)
36710	Electron tubes, n.s.k. <sup>210</sup> -----	1982... 19.1 1977... 5.3	(X) (X)	(X) (X)	(X) (X)	(X) (X)	(X) (NA)
3674-	Semiconductors and related devices -----	1982... 11 215.4 1977... 4 532.3 1972... 2 362.0 1967... 1 162.0 1963... 623.3 1958... 236.7	36 41 53 46 39 46	54 60 66 62 59 64	74 74 78 83 85 92	87 87 91 96 97 99	497 (NA) (NA) (NA) (NA) (NA)
36741	Integrated microcircuits -----	1982... 7 298.4 1977... 2 697.1 1972... 1 273.9 1967... 247.5	40 46 69 67	59 68 79 83	83 88 91 97	97 98 98 100	604 (NA) (NA) (NA)
36742	Transistors -----	1982... 596.1 1977... 462.6 1972... 409.1 1967... 447.0	59 66 70 56	75 80 84 77	93 94 97 95	100 100 (D) 100	1 354 (NA) (NA) (NA)
36743	Diodes and rectifiers -----	1982... 506.2 1977... 414.9 1972... 300.8 1967... 287.5	51 48 46 37	67 68 62 61	90 91 88 91	99+ 100 99+ 100	882 (NA) (NA) (NA)
36749	Semiconductor devices, n.e.c. -----	1982... 2 334.8 1977... 835.8 1972... 337.2 1967... 176.0	49 38 39 39	62 52 57 59	82 75 83 86	96 94 97 99+	889 (NA) (NA) (NA)
36740	Semiconductors and related devices, n.s.k. -----	1982... 479.9 1977... 122.0 1972... 41.0 1967... 4.0	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
36750	Capacitors for electronic circuitry (1967 product class 36792) -----	1982... 1 207.1 1977... 736.1 1972... 454.4 1967... 430.7 1963... 318.8 1958... 183.6	47 43 38 35 36 40	64 57 56 54 56 57	85 82 80 77 77 83	97 96 94 94 92 96	752 (NA) (NA) (NA) (NA) (NA)
36760	Resistors for electronic circuitry (1967 product class 36793) -----	1982... 758.3 1977... 583.0 1972... 438.5 1967... 442.4 1963... 312.6 1958... 146.8	37 38 40 38 39 43	61 56 60 55 53 60	83 83 83 78 77 84	96 97 96 96 94 99	547 (NA) (NA) (NA) (NA) (NA)
36770	Coils, transformers, reactors, and chokes (1967 product class 36794) -----	1982... 924.6 1977... 605.8 1972... 391.8 1967... 446.5 1963... 274.4 1958... 192.0	12 19 14 23 21 (NA)	20 29 25 33 30 (NA)	36 44 46 61 46 (NA)	56 64 70 80 66 (NA)	91 (NA) (NA) (NA) (NA)
3678-	Electronic connectors (1977 product class 36780) <sup>11</sup> -----	1982... 2 353.3 1977... 986.0	37 39	51 54	73 75	91 92	557 (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.							
3678-	Electronic connectors (1977 product class 36780) <sup>11</sup> —Con.							
	1972__	521.1	48	66	82	95	(NA)	
36781	Coaxial (rf) connectors for electronic circuitry <sup>211</sup> -----	1982__	223.3	54	79	97	100	965
36782	Cylindrical connectors for electronic circuitry <sup>211</sup> -----	1982__	411.7	64	81	96	100	1 221
36783	Rack and panel (rectangular) connectors for electronic circuitry <sup>211</sup> __	1982__	401.2	70	87	99	100	1 719
36784	Printed circuit connectors for electronic circuitry <sup>211</sup> -----	1982__	464.0	59	72	91	100	1 661
36785	Connectors for electronic circuitry, n.e.c. <sup>211</sup> -----	1982__	740.0	36	56	79	96	506
36780	Connectors for electronic circuitry, n.s.k. <sup>211</sup> -----	1982__	113.1	(X)	(X)	(X)	(X)	(X)
3679-	Electronic components, n.e.c. (1977 product class 36790) <sup>11</sup> ---	1982__	13 845.6	30	34	43	54	557
	1977__	5 541.1	24	29	40	53	(NA)	(NA)
	1972__	3 211.8	33	39	50	62	(NA)	(NA)
36791	Crystals, filters, and other related devices <sup>212</sup> -----	1982__	429.8	34	46	67	92	610
36792	Magnetic recording media <sup>212</sup> -----	1982__	953.8	67	86	99	100	1 505
36793	Microwave components and devices <sup>212</sup> -----	1982__	794.5	35	49	72	93	515
36794	Relays for electronic circuitry <sup>212</sup> -----	1982__	305.2	54	70	88	99	958
36795	Transducers, electrical/electronic input or output <sup>212</sup> -----	1982__	357.0	33	47	75	97	467
36796	Switches, mechanical, for electronic circuitry <sup>212</sup> -----	1982__	468.6	34	57	89	99	540
36797	Printed circuit boards <sup>212</sup> -----	1982__	2 288.9	20	26	40	59	185
36798	Complex components <sup>212</sup> -----	1982__	2 655.9	84	89	95	99	(D)
36799	Electronic components, n.e.c. <sup>212</sup> -----	1982__	4 075.8	(D)	(D)	54	69	1 031
36790	Electronic components, n.e.c., n.s.k. <sup>212</sup> -----	1982__	1 516.0	(X)	(X)	(X)	(X)	(X)
3691-	Storage batteries -----	1982__	2 347.4	55	78	91	97	982
	1977__	1 911.0	58	84	92	98	(NA)	(NA)
	1972__	950.3	58	85	93	98	(NA)	(NA)
	1967__	579.4	60	81	92	97	(NA)	(NA)
	1963__	504.5	60	78	92	97	(NA)	(NA)
	1958__	361.5	64	81	91	96	(NA)	(NA)
	1954__	336.1	65	80	90	(NA)	(NA)	(NA)
36913	Storage batteries, lead acid type, 1.5 cu ft and smaller <sup>11</sup> -----	1982__	1 757.8	68	88	97	100	1 386
	1977__	1 458.1	67	92	98	100	(NA)	(NA)
36914	Storage batteries, lead acid type, more than 1.5 cu ft <sup>11</sup> -----	1982__	301.8	73	87	99	100	1 668
	1977__	233.8	78	91	99+	100	(NA)	(NA)
36915	Storage batteries, except lead acid <sup>11</sup> -----	1982__	228.9	73	90	(D)	(D)	2 181
	1977__	164.3	59	85	100	(X)	(X)	(NA)
36910	Storage batteries, n.s.k. -----	1982__	58.9	(X)	(X)	(X)	(X)	(X)
	1977__	54.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972__	23.6	(X)	(X)	(X)	(X)	(X)	(NA)
	1967__	19.9	(X)	(X)	(X)	(X)	(X)	(NA)
	1963__	4.5	(X)	(X)	(X)	(X)	(X)	(NA)
	1958__	4.0	(X)	(X)	(X)	(X)	(X)	(NA)
36920	Primary batteries, dry and wet -----	1982__	1 066.4	87	92	99	100	(D)
	1977__	623.9	85	96	99	100	(NA)	(NA)
	1972__	318.3	91	96	99	100	(NA)	(NA)
	1967__	327.9	85	95	99+	100	(NA)	(NA)
	1963__	191.6	83	91	99+	100	(NA)	(NA)
	1958__	135.7	84	94	99	100	(NA)	(NA)
	1954__	117.9	80	94	99	(NA)	(NA)	(NA)
3693-	X-ray and electromedical apparatus <sup>213</sup> -----	1982__	3 834.2	33	48	70	88	428
36931	Irradiation (ionizing radiation) equipment <sup>11</sup> -----	1982__	1 355.9	66	78	91	99+	1 772
	1977__	664.6	63	79	93	100	(NA)	(NA)
36933	Electromedical equipment <sup>213</sup> -----	1982__	2 433.9	29	46	70	92	367
36930	X-ray and electromedical equipment, n.s.k. -----	1982__	44.4	(X)	(X)	(X)	(X)	(X)
	1977__	65.5	(X)	(X)	(X)	(X)	(X)	(NA)
3694-	Engine electrical equipment -----	1982__	3 007.8	54	65	80	88	1 403
	1977__	3 049.3	60	75	85	93	(NA)	(NA)
	1972__	1 780.7	62	75	85	93	(NA)	(NA)
	1967__	1 220.2	62	74	85	93	(NA)	(NA)
	1963__	873.9	68	77	85	94	(NA)	(NA)
	1958__	586.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
36	ELECTRIC AND ELECTRONIC EQUIPMENT—Con.							
3694-	Engine electrical equipment—Con.							
	1954--	588.2	63	79	87	(NA)	(NA)	
36941	Ignition harness and cable sets -----							
	1982--	319.0	35	54	80	99	495	
	1977--	252.8	40	55	81	99+	(NA)	
	1972--	112.8	43	58	83	99+	(NA)	
	1967--	76.5	45	66	90	100	(NA)	
	1963--	58.9	58	78	94	100	(NA)	
	1958--	28.8	(NA)	(NA)	(NA)	(NA)	(NA)	
	1954--	53.9	77	86	96	(NA)	(NA)	
36942	Alternators, generators, and regulators -----							
	1982--	584.9	65	77	87	95	2 026	
	1977--	631.7	77	88	97	99+	(NA)	
	1972--	382.0	80	91	98	99+	(NA)	
	1967--	288.3	77	88	95	99+	(NA)	
	1963--	199.3	83	93	97	99+	(NA)	
	1958--	104.9	87	94	99	(D)	(NA)	
36943	Cranking motors (starters)-----							
	1982--	483.5	78	88	94	99	2 712	
	1977--	464.3	89	96	99	100	(NA)	
	1972--	313.6	88	96	99+	100	(NA)	
	1967--	221.1	89	94	98	99+	(NA)	
	1963--	134.7	(D)	(D)	99+	100	(NA)	
	1958--	82.3	97	99	(D)	(X)	(NA)	
36944	Spark plugs -----							
	1982--	525.8	97	99+	100	(X)	(D)	
	1977--	419.6	(D)	99+	100	(X)	(NA)	
	1972--	290.3	99+	100	(X)	(X)	(NA)	
	1967--	186.4	98	99+	100	(X)	(NA)	
	1963--	143.8	96	99	(D)	100	(NA)	
	1958--	123.1	(D)	(D)	(D)	100	(NA)	
36947	Complete engine electrical equipment, n.e.c. <sup>214</sup> -----	1982--	633.8	70	82	97	100	2 277
36949	Parts for engine electrical equipment (1977 product class 36946) ---							
	1982--	324.1	67	82	96	100	1 782	
	1977--	310.0	59	79	96	100	(NA)	
	1972--	225.5	62	79	95	99+	(NA)	
	1967--	150.6	61	77	95	100	(NA)	
	1963--	114.7	55	69	90	(D)	(NA)	
	1958--	103.3	54	70	90	(D)	(NA)	
36940	Engine electric equipment, n.s.k. -----							
	1982--	136.8	(X)	(X)	(X)	(X)	(X)	
	1977--	75.6	(X)	(X)	(X)	(X)	(NA)	
	1972--	44.8	(X)	(X)	(X)	(X)	(NA)	
	1967--	29.6	(X)	(X)	(X)	(X)	(NA)	
	1963--	5.4	(X)	(X)	(X)	(X)	(NA)	
	1958--	10.6	(X)	(X)	(X)	(X)	(NA)	
3699-	Electrical equipment and supplies, n.e.c. -----							
	1982--	<sup>51</sup> 351.0	23	30	43	59	203	
	1977--	<sup>58</sup> 878.8	24	31	45	61	(NA)	
	1972--	<sup>56</sup> 60.5	26	33	45	60	(NA)	
	1967--	<sup>53</sup> 22.1	35	44	58	75	(NA)	
	1963--	<sup>52</sup> 33.9	43	50	64	79	(NA)	
	1958--	<sup>51</sup> 83.0	45	55	67	80	(NA)	
36993	Electrical comfort heating equipment <sup>11</sup> -----							
	1982--	94.0	50	74	98	100	923	
	1977--	87.3	47	69	93	100	(NA)	
36994	Electrical products, n.e.c. <sup>11</sup> -----							
	1982--	836.4	37	48	64	82	498	
	1977--	476.7	41	52	70	86	(NA)	
36996	Apparatus wire and cordage (manufactured from purchased materials) (also see code 33576) -----							
	1982--	<sup>51</sup> 171.0	23	39	71	99	326	
	1977--	<sup>51</sup> 32.3	29	45	70	97	(NA)	
	1972--	<sup>59</sup> 4.5	36	57	86	(D)	(NA)	
	1967--	<sup>59</sup> 2.6	31	45	70	96	(NA)	
	1963--	<sup>56</sup> 6.0	34	48	70	94	(NA)	
	1958--	<sup>56</sup> 0.9	33	45	66	88	(NA)	
36990	Electrical equipment, n.e.c., n.s.k. -----							
	1982--	249.6	(X)	(X)	(X)	(X)	(X)	
	1977--	182.5	(X)	(X)	(X)	(X)	(NA)	
	1972--	146.4	(X)	(X)	(X)	(X)	(NA)	
	1967--	37.1	(X)	(X)	(X)	(X)	(NA)	
	1963--	10.9	(X)	(X)	(X)	(X)	(NA)	
	1958--	6.3	(X)	(X)	(X)	(X)	(NA)	
37	TRANSPORTATION EQUIPMENT							
3711-	Motor vehicles and car bodies-----							
	1982--	66 705.6	92	97	99	99+	(D)	
	1977--	72 979.1	94	99	99+	99+	(NA)	
	1972--	41 054.3	93	99	99+	99+	(NA)	
	1967--	25 921.6	93	98	99+	99+	(NA)	
37111	Passenger cars -----							
	1982--	42 902.3	(D)	(D)	100	(X)	(D)	
	1977--	47 798.9	99+	99+	100	(X)	(NA)	
	1972--	29 246.2	99+	(D)	100	(X)	(NA)	
	1967--	19 277.4	99	(D)	100	(X)	(NA)	
	1963--	16 768.3	99	(D)	100	(X)	(NA)	
	1958--	9 217.7	99	(D)	100	(X)	(NA)	
	1954--	9 471.8	98	99	100	(X)	(NA)	

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**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
37	TRANSPORTATION EQUIPMENT—Con.						
3711- 37112	Motor vehicles and car bodies—Con. Trucks, truck tractors, and truck chassis -----	1982.. 19 295.5 1977.. 21 543.5 1972.. 9 567.8 1967.. 4 263.7 1963.. 3 376.2 1958.. 1 933.7 1954.. 1 732.1	85 85 84 82 81 78 77	98 98 97 95 96 96 93	99+ 99+ 99+ 99+ 99+ 99 99	100 100 100 100 99+ 100 (NA)	2 839 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
37113	Buses and fire department vehicles -----	1982.. 893.5 1977.. (215) 1972.. 240.5 1967.. 179.8 1963.. 182.5 1958.. 99.2	65 (215) 80 82 83 84	86 (215) 93 95 92 94	99 (215) 100 100 (D) 99	100 (215) (X) (X) 100 100	1 326 (NA) (NA) (NA) (NA) (NA) (NA)
37114	Military vehicles -----	1982.. (D) 1977.. (215) 1972.. (216) 1967.. (216)	(D) (215) (216) (216)	(D) (215) (216) (216)	(X) (215) (X) (216)	(X) (215) (X) (216)	(X) (NA) (NA) (NA)
37115	Passenger car bodies -----	1982.. (D) 1977.. 2153 636.7 1972.. 2161 965.7 1967.. 2162 160.1	(D) 215(D) 216(D) 216(D)	(X) 215(D) 216(D) 21698	(X) 215(D) 216100 21699+	(X) 21599+ (X) 216100	(X) (NA) (NA) (NA)
37110	Motor vehicles, n.s.k. -----	1982.. (D) 1977.. (215) 1972.. 33.7 1967.. 40.7	(X) (215) (X) (X)	(X) (215) (X) (X)	(X) (215) (X) (X)	(X) (215) (X) (X)	(X) (NA) (NA) (NA)
3713-	Truck and bus bodies (1967 product class 37130) -----	1982.. 2 304.4 1977.. 1 880.9 1972.. 1 448.8 1967.. 595.4 1963.. 419.7 1958.. 274.9 1954.. 215.2	29 33 25 20 23 19 18	36 40 32 28 33 27 26	51 52 45 43 49 43 42	66 65 62 61 66 63 (NA)	489 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
37131	Truck, bus, and other vehicle bodies <sup>217</sup> -----	1982.. 1 672.6 1977.. 1 326.5 1972.. 622.7	38 45 16	46 54 27	61 68 47	75 82 66	886 (NA) (NA)
37132	Complete vehicles produced on purchased chassis <sup>217</sup> -----	1982.. 523.8 1977.. 316.7 1972.. 712.1	32 21 44	47 36 55	69 60 74	90 85 91	385 (NA) (NA)
37130	Truck and bus bodies, n.s.k. -----	1982.. 108.0 1977.. 237.7 1972.. 114.0	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3714-	Motor vehicle parts and accessories -----	1982.. 38 414.2 1977.. 37 841.8 1972.. 19 399.2 1967.. 11 735.2	63 64 62 61	70 71 70 69	78 80 79 79	85 87 87 88	2 103 (NA) (NA) (NA)
37142	Gasoline engines and gasoline engine parts for motor vehicles, new <sup>218</sup> -----	1982.. 8 274.1	(D)	(D)	90	96	(D)
37144	Filters for internal combustion engines and motor vehicles, new <sup>218</sup> -----	1982.. 1 028.9	60	84	98	100	1 120
37145	Exhaust system parts, new <sup>218</sup> -----	1982.. 1 672.2	69	87	97	100	1 825
37146	Drive train components, new, except wheels and brakes <sup>218</sup> -----	1982.. 9 798.9	77	92	97	99	2 561
37147	Motor vehicle wheels <sup>218</sup> -----	1982.. 815.4	49	75	98	100	859
37148	Brake parts and assemblies, new <sup>218</sup> -----	1982.. 2 211.0	63	78	94	99+	1 497
37149	All other motor vehicle parts and accessories, new, n.e.c. <sup>218</sup> -----	1982.. 12 709.5	(D)	73	82	89	2 817
37143	Rebuilt parts for motor vehicles, excluding carburetors and engine electrical equipment <sup>218</sup> -----	1982.. 890.4 1977.. 592.9 1972.. 365.5 1967.. 197.5	20 21 25 20	32 33 39 36	55 54 61 57	79 77 82 79	206 (NA) (NA) (NA)
37140	Motor vehicle parking and accessories, n.s.k. -----	1982.. 1 013.9 1977.. 513.5 1972.. 289.8 1967.. 210.7	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
3715-	Truck trailers (1967 product class 37130) -----	1982.. 1 667.5 1977.. 1 807.0 1972.. 1 077.3 1967.. 702.2 1963.. 484.7 1958.. 284.0 1954.. 262.0	37 44 46 48 60 52 56	49 56 60 62 70 63 65	67 69 76 82 81 76 81	83 84 89 94 91 91 (NA)	499 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
37151	Truck trailers with axle ratings of 10,000 lb or more -----	1982.. 1 525.5 1977.. 1 680.9 1972.. 962.7	40 47 52	54 60 67	73 74 83	88 90 95	591 (NA) (NA)
37152	Truck trailers with axle ratings of less than 10,000 lb -----	1982.. 78.3 1977.. 41.3 1972.. 64.6	53 39 54	75 56 74	94 86 94	100 100 100	930 (NA) (NA)
37150	Truck trailers, n.s.k. -----	1982.. 63.7 1977.. 84.8 1972.. 50.0	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
37	TRANSPORTATION EQUIPMENT—Con.						
37160	Motor homes produced on purchased chassis (1977 product class 37161) <sup>217</sup> -----	1982-- 1 035.7 1977-- 1 494.6	53 39	63 55	83 71	97 90	1 017 (NA)
3721-	Aircraft -----	1982-- 24 235.1 1977-- 12 052.8 1972-- 7 538.3 1967-- 9 172.2 1963-- 4 330.5 1958-- 5 362.8 1954-- 5 546.0	67 61 69 76 58 62 55	82 81 87 89 82 83 79	98 98 98 99 98 97 97	99+ 99+ 99+ 99+ 99+ 99 (NA)	1 426 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
37211	Military aircraft -----	1982-- 9 834.5 1977-- 4 579.6 1972-- 2 802.9 1967-- 4 408.0 1963-- 2 470.3 1958-- 3 501.7	75 75 74 77 68 61	94 93 94 95 89 86	99+ 100 99 99 99 99	100 (X) 100 100 100 100 100	1 739 (NA) (NA) (NA) (NA) (NA) (NA)
37215	Civilian aircraft <sup>219</sup> -----	1982-- 8 769.4	77	93	99+	100	2 919
37217	Modification, conversion, and overhaul of aircraft (1977 product class 37214)-----	1982-- 2 783.4 1977-- 747.2 1972-- 373.9 1967-- 596.8 1963-- 465.5 1958-- 298.8	64 54 63 57 64 70	83 82 83 82 90 92	98 99 99 99 99+ 99	100 100 100 100 100 100	1 778 (NA) (NA) (NA) (NA) (NA) (NA)
37218	Aeronautical services on aircraft, n.e.c. (1977 product class 37218) -----	1982-- 2 817.1 1977-- 1 988.2 1972-- 1 067.1 1967-- 635.2 1963-- 668.4 1958-- 574.0	70 78 77 77 78 62	87 93 94 94 91 82	99 99+ 99+ 99+ 99 97	100 100 100 100 100 99	1 585 (NA) (NA) (NA) (NA) (NA) (NA)
37210	Complete aircraft, n.s.k. -----	1982-- 30.7 1977-- 31.7 1972-- 32.9 1967-- 27.3 1963-- 7.5	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)
3724-	Aircraft engines and engine parts <sup>220</sup> -----	1982-- 11 640.8 1977-- 4 994.6 1972-- 3 069.7	72 70 74	82 82 83	90 90 90	95 95 96	2 115 (NA) (NA)
37241	Aircraft engines for military aircraft (1967 product class 37221) ----	1982-- (D) 1977-- 1 047.9 1972-- 437.2 1967-- 1 087.6 1963-- 644.4	(D) (D) 96 94 97	(D) (D) 99+ 98 99	(X) 100 100 99+ 99+	(X) (X) (X) 100 100	(X) (NA) (NA) (NA) (NA)
37242	Aircraft engines for civilian aircraft (1967 product class 37222) -----	1982-- 2 142.6 1977-- 937.0 1972-- 609.2 1967-- 690.7 1963-- 150.0	92 84 92 (D) (D)	(D) (D) 99+ 99+ (D)	(D) 100 100 100 100	(X) (X) (X) (X) (X)	2 733 (NA) (NA) (NA) (NA) (NA)
37243	Aeronautical services on aircraft engines (1967 product class 37223) -----	1982-- (D) 1977-- 660.8 1972-- 692.0 1967-- 526.5 1963-- 385.3	(D) 83 83 94 87	(D) 95 96 99+ 98	(D) 99+ (D) 100 99+	(D) 100 100 (X) 100	(X) (NA) (NA) (NA) (NA)
37244	Aircraft engine parts and accessories (1967 product class 37224) ---	1982-- 5 725.5 1977-- 2 308.5 1972-- 1 306.7 1967-- 1 422.9 1963-- 932.1	57 57 57 55 53	71 71 72 71 68	82 83 83 84 85	92 92 93 94 95	1 284 (NA) (NA) (NA) (NA) (NA)
37240	Aircraft engine and engine parts, n.s.k. (1967 product class 37220) <sup>11</sup> -----	1982-- 79.4 1977-- 40.4 1972-- 24.6	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3728-	Aircraft equipment, n.e.c. <sup>221</sup> -----	1982-- 10 789.1 1977-- 5 761.5 1972-- 3 433.7	32 35 30	47 52 45	71 74 70	84 86 85	435 (NA) (NA)
37281	Aircraft parts and accessories, n.e.c. <sup>222</sup> -----	1982-- 9 862.4	34	49	73	87	473
37282	Aircraft propellers and helicopter rotors <sup>222</sup> -----	1982-- 191.0	69	85	98	100	2 247
37283	Research and development on aircraft parts (1967 product class 37293) -----	1982-- 432.2 1977-- 161.4 1972-- 99.5 1967-- 85.7 1963-- 74.5	61 64 75 59 82	79 78 88 83 90	96 94 98 98 99	100 100 100 100 100	1 446 (NA) (NA) (NA) (NA) (NA)
37280	Aircraft equipment, n.e.c., n.s.k. <sup>11</sup> -----	1982-- 303.5 1977-- 163.2 1972-- 110.3	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3731-	Ship building and repairing -----	1982-- 10 654.5 1977-- 6 270.3 1972-- 3 200.5 1967-- 2 357.9	36 44 46 42	50 59 63 60	69 76 80 78	84 88 91 89	432 (NA) (NA) (NA) (NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
37	TRANSPORTATION EQUIPMENT—Con.							
3731-	Ship building and repairing—Con.							
	1963--	1 518.0	48	63	81	92	(NA)	
	1958--	1 467.4	48	66	80	91	(NA)	
	1954--	970.3	43	59	74	(NA)	(NA)	
37311	Nonpropelled ships, new construction -----	1982--	1 336.6	48	62	85	99	790
	1977--	491.1	39	63	87	99	(NA)	(NA)
	1972--	361.7	44	73	95	99+	(NA)	(NA)
	1967--	149.0	46	68	93	100	(NA)	(NA)
	1963--	82.2	48	66	92	99+	(NA)	(NA)
	1958--	95.3	36	61	90	99	(NA)	(NA)
37312	Self-propelled ships, military, new -----	1982--	4 094.5	69	91	100	(X)	1 383
	1977--	2 211.7	86	96	99+	100	(NA)	(NA)
	1972--	1 100.0	90	97	99+	100	(NA)	(NA)
	1967--	973.8	68	88	99	100	(NA)	(NA)
	1963--	681.8	70	89	99+	100	(NA)	(NA)
	1958--	470.0	63	88	91	100	(NA)	(NA)
37313	Self-propelled ships, nonmilitary, new-----	1982--	1 872.0	34	48	72	90	431
	1977--	1 917.3	41	60	81	95	(NA)	(NA)
	1972--	816.0	39	60	83	96	(NA)	(NA)
	1967--	361.8	44	59	77	92	(NA)	(NA)
	1963--	242.8	67	79	93	99	(NA)	(NA)
	1958--	441.2	77	89	95	99	(NA)	(NA)
37314	Ship repair, military -----	1982--	1 571.2	44	64	87	99	808
	1977--	718.0	41	67	90	99+	(NA)	(NA)
	1972--	386.5	55	74	93	99+	(NA)	(NA)
	1967--	423.0	48	69	90	98	(NA)	(NA)
	1963--	221.9	46	64	86	98	(NA)	(NA)
	1958--	123.8	42	55	77	96	(NA)	(NA)
37316	Ship repair, nonmilitary-----	1982--	1 592.2	25	42	63	82	287
	1977--	789.1	40	55	72	89	(NA)	(NA)
	1972--	484.2	49	65	77	89	(NA)	(NA)
	1967--	407.2	49	62	79	91	(NA)	(NA)
	1963--	277.4	44	56	75	89	(NA)	(NA)
	1958--	326.8	47	59	74	87	(NA)	(NA)
37310	Ship building and repairing, n.s.k. -----	1982--	188.0	(X)	(X)	(X)	(X)	(X)
	1977--	143.2	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972--	52.1	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967--	43.2	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963--	11.9	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958--	10.3	(X)	(X)	(X)	(X)	(NA)	(NA)
3732-	Boat building and repairing -----	1982--	2 307.4	14	22	35	51	89
	1977--	1 822.1	13	21	34	50	(NA)	(NA)
	1972--	1 026.3	15	24	38	54	(NA)	(NA)
	1967--	570.8	19	27	40	55	(NA)	(NA)
	1963--	338.1	21	29	42	56	(NA)	(NA)
	1958--	300.1	16	23	34	50	(NA)	(NA)
	1954--	163.6	18	24	37	(NA)	(NA)	(NA)
37322	Outboard motorboats -----	1982--	345.0	19	30	52	79	191
	1977--	297.7	21	33	54	79	(NA)	(NA)
	1972--	233.8	20	33	58	84	(NA)	(NA)
	1967--	70.2	30	49	71	90	(NA)	(NA)
	1963--	79.6	28	42	64	87	(NA)	(NA)
	1958--	108.4	19	29	50	77	(NA)	(NA)
37323	Inboard motorboats <sup>223</sup> -----	1982--	522.3	37	52	72	91	460
37324	Inboard-outdrive boats <sup>223</sup> -----	1982--	459.9	42	57	80	95	641
37327	Boats, n.e.c. -----	1982--	368.8	23	40	64	85	276
	1977--	282.1	27	43	68	87	(NA)	(NA)
	1972--	130.5	34	53	73	89	(NA)	(NA)
	1967--	45.6	34	50	74	91	(NA)	(NA)
	1963--	36.5	34	49	70	90	(NA)	(NA)
	1958--	15.5	40	52	74	94	(NA)	(NA)
37328	Boat repair, military and nonmilitary -----	1982--	271.2	25	36	52	73	265
	1977--	173.2	14	23	41	67	(NA)	(NA)
	1972--	74.4	14	26	46	76	(NA)	(NA)
	1967--	82.2	18	29	50	75	(NA)	(NA)
	1963--	42.6	17	26	44	70	(NA)	(NA)
	1958--	55.1	17	26	40	56	(NA)	(NA)
37320	Boat building and repairing, n.s.k. -----	1982--	340.1	(X)	(X)	(X)	(X)	(X)
	1977--	347.8	(X)	(X)	(X)	(X)	(NA)	(NA)
	1972--	206.4	(X)	(X)	(X)	(X)	(NA)	(NA)
	1967--	114.0	(X)	(X)	(X)	(X)	(NA)	(NA)
	1963--	53.5	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958--	45.1	(X)	(X)	(X)	(X)	(NA)	(NA)
3743-	Railroad equipment (1967 industries 3741 and 3742) <sup>11</sup> -----	1982--	2 878.9	54	68	85	95	1 022
	1977--	4 001.9	48	62	83	95	(NA)	(NA)
	1972--	2 275.5	55	68	89	97	(NA)	(NA)
37431	Locomotives, both new and rebuilt, and parts <sup>11</sup> -----	1982--	(D)	(D)	(D)	(D)	(D)	(D)
	1977--	(D)	(D)	(D)	(D)	(D)	(D)	(X)

See footnotes at end of table.



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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
37	TRANSPORTATION EQUIPMENT—Con.						
3743- 37431	Railroad equipment (1967 industries 3741 and 3742) <sup>11</sup> —Con. Locomotives, both new and rebuilt, and parts <sup>11</sup> —Con.	1972--	(D)	(D)	(D)	(D)	(X)
37432	Passenger and freight train cars <sup>11</sup> -----	1982-- 1977-- 1972--	(D) (D) (D)	(D) (D) (D)	(D) (D) (D)	(D) (D) (D)	983 (NA) (NA)
37433	Street, subway, trolley, and rapid transit cars (1967 product class 37423)-----	1982-- 1977-- 1972-- 1967-- 1963--	663.7 899.1 501.2 340.4 310.2	54 39 49 37 46	67 57 67 54 63	86 80 85 81 84	99 97 99 98 98
37430	Railroad equipment, n.s.k.-----	1982-- 1977-- 1972-- 1967--	63.1 47.0 23.7 8.8	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
3751-	Motorcycles, bicycles, and parts <sup>224</sup> -----	1982-- 1977-- 1972-- 1967-- 1963-- 1958-- 1954--	1 143.1 847.3 540.8 262.6 163.4 105.8 88.3	53 62 64 54 47 52 47	73 77 78 73 73 75 72	85 86 89 93 92 95 93	92 92 95 99+ 99 99 (NA)
37511	Bicycles and parts-----	1982-- 1977-- 1972--	601.6 490.4 397.0	72 76 70	85 92 89	96 99 99+	100 100 100
37512	Motorcycles and parts-----	1982-- 1977-- 1972--	480.8 286.1 112.3	80 (D) (D)	87 87 77	93 94 89	99 99+ 99+
37510	Motorcycles, bicycles, and parts, n.s.k.-----	1982-- 1977-- 1972--	60.8 70.7 31.5	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3761-	Guided missiles and space vehicles (1967 industry 1925)-----	1982-- 1977-- 1972--	8 585.6 4 848.2 3 705.4	65 65 59	92 93 86	100 99+ 99+	(X) 100 100
37611	Complete missiles (1967 product class 19251)-----	1982-- 1977-- 1972--	2 644.8 1 685.5 1 246.3	71 77 75	93 (D) 95	100 100 100	(X) (X) (X)
37612	Complete space vehicles and booster stages (1967 product class 19252)-----	1982-- 1977-- 1972--	2 010.7 822.1 754.8	83 91 93	(D) (D) (D)	(D) 100 100	(X) (X) (X)
37613	Research and development on complete missiles (1967 product class 19253)-----	1982-- 1977-- 1972--	1 504.0 871.5 660.8	80 86 78	98 99 94	(D) 100 100	(X) (X) (X)
37614	Research and development on complete space vehicles (1967 product class 19254)-----	1982-- 1977-- 1972--	987.2 918.1 599.8	97 (D) 85	(D) 99 97	(D) 100 100	(X) (X) (X)
37615	Other services on complete missiles and space vehicles (1967 product class 37255)-----	1982-- 1977-- 1972--	1 438.3 549.9 440.2	74 73 65	97 90 93	100 (D) 100	(X) 100 (X)
37610	Guided missiles and space vehicles, n.s.k. (1967 product class 19250)-----	1982-- 1977-- 1972--	.5 1.1 3.5	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3764-	Space propulsion units and parts <sup>220</sup> -----	1982-- 1977-- 1972--	2 199.1 983.5 740.6	63 63 52	87 83 84	97 (D) 98 97	100 (NA) 99+
37645	Missile or space vehicle propulsion units (1967 product class 37225)-----	1982-- 1977-- 1972-- 1967-- 1963--	960.7 424.0 434.6 451.7 582.6	68 60 71 82 82	93 93 94 99 99+	100 100 100 100 100	(X) (X) (X) (X) (X)
37646	Research and development on propulsion units (1967 product class 37226)-----	1982-- 1977-- 1972-- 1967-- 1963--	694.8 345.8 143.4 389.1 696.8	86 95 72 76 89	99 (D) 90 95 (D)	100 100 100 100 100	(X) (X) (X) (X) (X)
37647	Other services on propulsion units (1967 product class 37227)-----	1982-- 1977-- 1972-- 1967-- 1963--	238.0 105.0 115.0 88.4 61.7	88 (D) (D) 89 95	99 100 100 100 99+	(D) (X) (X) (X) 100	(X) (NA) (NA) (NA) (NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
37	TRANSPORTATION EQUIPMENT—Con.						
3764- 37648	Space propulsion units and parts <sup>220</sup> —Con. Propulsion unit parts and accessories (1967 product class 37228)----	1982-- 301.5 1977-- 105.6 1972-- 47.1 1967-- 93.9 1963-- 147.8	49 48 55 48 48	69 71 71 66 66	94 95 94 87 86	100 100 100 99+ 97	831 (NA) (NA) (NA) (NA) (NA)
37640	Space propulsion units and parts, n.s.k. -----	1982-- 4.2 1977-- 3.1 1972-- .5	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(D) (NA) (NA)
3769-	Space vehicle equipment, n.e.c. <sup>221</sup> -----	1982-- 2 573.9 1977-- 882.4 1972-- 833.8	65 51 52	77 66 66	92 85 87	98 97 97	1 490 (NA) (NA)
37692	Missile and space vehicle parts, n.e.c. (1967 product class 37292)-----	1982-- 1 161.0 1977-- 420.0 1972-- 428.3 1967-- 674.0 1963-- 1 009.3 1958-- 509.2	50 37 41 36 45 57	68 55 59 50 56 51	87 80 84 70 75 96	98 97 97 88 90 99	812 (NA) (NA) (NA) (NA) (NA) (NA)
37694	Research and development on missile and space vehicle parts, n.e.c. (1967 product class 37294)-----	1982-- 1 403.3 1977-- 455.2 1972-- 405.5 1967-- 403.2 1963-- 420.4 1958-- 380.7	83 81 (D) (D) 61 56	95 89 91 85 76 79	99+ 99 99 96 92 99	100 100 100 100 99+ 100	2 746 (NA) (NA) (NA) (NA) (NA) (NA)
37690	Space vehicle equipment, n.e.c., n.s.k. -----	1982-- 9.6 1977-- 7.2 1972-- --	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3792-	Travel trailers and campers <sup>225</sup> -----	1982-- 1 088.1 1977-- 1 477.6 1972-- 1 270.3	31 31 20	41 41 28	56 54 41	74 68 58	369 (NA) (NA)
37921	Travel trailers -----	1982-- 628.0 1977-- 882.2 1972-- 620.3	50 50 39	62 63 51	80 77 69	96 91 87	954 (NA) (NA)
37922	Camping trailers, campers, pickup covers -----	1982-- 340.4 1977-- 426.2 1972-- 273.2	25 21 25	41 35 36	68 54 54	88 74 76	304 (NA) (NA)
37920	Travel trailers and campers, n.s.k. -----	1982-- 119.7 1977-- 169.2 1972-- 376.8	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
37950	Tanks and tank components (1967 product class 19310) -----	1982-- 2 680.5 1977-- 1 015.1 1972-- 285.1	74 76 83	87 93 92	96 98 98	99+ 100 100	1 720 (NA) (NA)
3799-	Transportation equipment, n.e.c. <sup>225</sup> -----	1982-- 954.3 1977-- 700.3 1972-- 786.5	19 29 26	27 39 38	45 57 53	67 74 71	169 (NA) (NA)
37993	Golf carts and industrial personnel carriers <sup>224</sup> -----	1982-- 156.8 1977-- 108.2 1972-- 54.1	86 90 90	97 98 99	100 100 100	(X) (X) (X)	2 917 (NA) (NA)
37994	Snowmobiles and parts -----	1982-- 63.9 1977-- 157.1 1972-- 203.1	100 88 85	100 (D) 96	(X) 100 (D)	(X) (X) 100	(D) (NA) (NA)
37996	Automobile and light truck trailers <sup>226</sup> -----	1982-- 272.0	23	39	64	83	268
37998	Transportation equipment, n.e.c., including all-terrain vehicles <sup>226</sup> ---	1982-- 389.3	25	39	62	86	314
37990	Transportation equipment, n.e.c., n.s.k. -----	1982-- 72.2 1977-- 81.4 1972-- 64.7	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
38	INSTRUMENTS AND RELATED PRODUCTS						
3811-	Engineering and scientific instruments -----	1982-- 2 964.4 1977-- 1 849.5 1972-- 1 106.0 1967-- 1 049.0 1963-- 688.5 1958-- 758.6	24 19 19 29 29 33	35 29 29 38 43 50	52 47 44 53 57 64	69 65 62 69 74 78	234 (NA) (NA) (NA) (NA) (NA) (NA)
38111	Aeronautical, nautical, and navigational instruments -----	1982-- 1 418.7 1977-- 804.6 1972-- 573.7 1967-- 585.5 1963-- 410.6 1958-- 509.9 1954-- 536.9	35 35 35 55 47 47 48	55 54 52 61 69 72 71	79 78 73 77 84 89 86	94 95 90 97 95 98 (NA)	497 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
38112	Laboratory and scientific apparatus -----	1982-- 1 083.6 1977-- 696.6 1972-- 335.9 1967-- 259.7 1963-- 161.6	39 32 20 15 16	47 42 28 27 31	63 58 44 46 51	82 76 67 (NA) 70	850 (NA) (NA) (NA) (NA)

See footnotes at end of table.



Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
38	INSTRUMENTS AND RELATED PRODUCTS—Con.						
3811- 38113	Engineering and scientific instruments—Con. Surveying and drafting instruments ----- 1982 ..	259.9	48	63	86	99 +	822
	1977 ..	168.9	52	67	89	99 +	(NA)
	1972 ..	131.2	45	57	78	98	(NA)
	1967 ..	139.4	49	64	85	97	(NA)
	1963 ..	104.0	39	56	75	92	(NA)
38110	Engineering and scientific instruments, n.s.k. ----- 1982 ..	202.2	(X)	(X)	(X)	(X)	(X)
	1977 ..	179.4	(X)	(X)	(X)	(X)	(NA)
	1972 ..	70.2	(X)	(X)	(X)	(X)	(NA)
	1967 ..	64.6	(X)	(X)	(X)	(X)	(NA)
	1963 ..	12.3	(X)	(X)	(X)	(X)	(NA)
	1958 ..	19.7	(X)	(X)	(X)	(X)	(NA)
38220	Heating, air conditioning, appliance controls ----- 1982 ..	1 544.5	49	67	83	93	917
	1977 ..	1 106.4	54	74	86	94	(NA)
	1972 ..	658.1	57	73	89	97	(NA)
	1967 ..	523.6	57	71	90	98	(NA)
	1963 ..	431.6	58	71	91	98	(NA)
	1958 ..	319.9	68	78	94	99	(NA)
	1954 ..	259.7	66	77	93	(NA)	(NA)
38230	Process control instruments <sup>227</sup> ----- 1982 ..	3 915.1	30	39	53	67	304
	1977 ..	2 061.1	26	40	59	75	(NA)
	1972 ..	794.7	27	41	63	81	(NA)
3824-	Fluid meters and counting devices ----- 1982 ..	787.1	35	52	75	91	456
	1977 ..	634.3	36	58	80	94	(NA)
	1972 ..	328.7	51	72	91	98	(NA)
38242	Integrating and totalizing meters for gas and liquids (1967 product class 38212) ----- 1982 ..	519.6	48	75	93	99 +	881
	1977 ..	344.0	50	76	94	100	(NA)
	1972 ..	207.7	68	90	99	100	(NA)
	1967 ..	189.2	67	88	99 +	100	(NA)
	1963 ..	163.7	72	93	99 +	100	(NA)
	1958 ..	119.4	66	88	99	100	(NA)
	1954 ..	107.1	62	83	98	(NA)	(NA)
38243	Counting devices <sup>228</sup> ----- 1982 ..	162.0	50	73	95	100	849
	1977 ..	147.0	59	75	95	100	(NA)
	1972 ..	48.8	73	84	95	100	(NA)
38244	Motor vehicle instruments (1967 product class 38214) ----- 1982 ..	76.2	47	73	97	100	932
	1977 ..	123.2	88	97	100	(X)	(NA)
	1972 ..	71.4	82	90	(D)	100	(NA)
	1967 ..	91.4	85	95	100	(X)	(NA)
	1963 ..	95.8	85	93	98	100	(NA)
	1958 ..	70.8	92	99	100	(X)	(NA)
38240	Fluid meters and counting devices, n.s.k. ----- 1982 ..	29.3	(X)	(X)	(X)	(X)	(X)
	1977 ..	20.1	(X)	(X)	(X)	(X)	(NA)
	1972 ..	.8	(X)	(X)	(X)	(X)	(NA)
3825-	Instruments to measure electricity (1967 industry 3611) <sup>229</sup> ---- 1982 ..	5 575.6	37	45	61	76	538
	1977 ..	2 566.2	30	39	56	72	(NA)
	1972 ..	1 329.7	32	42	57	71	(NA)
	1967 ..	1 165.1	31	39	54	71	(NA)
	1963 ..	755.6	30	41	57	73	(NA)
	1958 ..	587.8	21	35	53	71	(NA)
38251	Integrating instruments, electrical ----- 1982 ..	363.2	72	92	99	100	1 564
	1977 ..	223.5	84	95	99 +	100	(NA)
	1972 ..	169.5	79	91	98	(D)	(NA)
	1967 ..	101.6	76	87	99	100	(NA)
	1963 ..	93.2	84	96	99	100	(NA)
	1958 ..	88.8	82	91	99	99 +	(NA)
	1954 ..	73.1	93	99	99	(NA)	(NA)
38252	Test equipment for testing electrical circuits ----- 1982 ..	4 455.2	44	54	70	84	801
	1977 ..	1 784.9	42	52	69	82	(NA)
	1972 ..	889.0	45	53	66	81	(NA)
	1967 ..	700.4	42	51	65	81	(NA)
	1963 ..	443.4	38	47	61	78	(NA)
	1958 ..	341.9	26	38	57	75	(NA)
	1954 ..	190.0	17	29	50	(NA)	(NA)
38253	Instruments to measure electricity, n.e.c. <sup>229</sup> ----- 1982 ..	556.7	30	43	63	87	355
	1977 ..	429.9	25	40	64	87	(NA)
	1972 ..	223.4	26	44	66	86	(NA)
	1967 ..	306.7	26	42	66	(NA)	(NA)
	1963 ..	204.7	32	50	71	89	(NA)
	1958 ..	140.1	43	57	78	91	(NA)
38250	Instruments to measure electricity, n.s.k. (1967 product class 36110) ----- 1982 ..	200.5	(X)	(X)	(X)	(X)	(X)
	1977 ..	127.8	(X)	(X)	(X)	(X)	(NA)
	1972 ..	67.8	(X)	(X)	(X)	(X)	(NA)
	1967 ..	56.5	(X)	(X)	(X)	(X)	(NA)
	1963 ..	14.2	(X)	(X)	(X)	(X)	(NA)
	1958 ..	17.0	(X)	(X)	(X)	(X)	(NA)
3829-	Measuring and controlling devices, n.e.c. ----- 1982 ..	2 073.4	17	25	41	59	143
	1977 ..	1 073.1	18	26	41	58	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
38	INSTRUMENTS AND RELATED PRODUCTS—Con.						
3829-	Measuring and controlling devices, n.e.c.—Con.						
	1972..	595.2	20	32	46	65	(NA)
38291	Aircraft engine instruments, except flight (1967 product class 38211) .....	1982.. 311.0 1977.. 120.1 1972.. 74.5 1967.. 120.0 1963.. 66.4 1958.. 55.5 1954.. 80.5	61 61 61 64 55 54 42	78 74 75 81 73 77 59	95 94 95 97 97 97 87	100 100 100 100 100 100 (NA)	1 112 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
38292	Physical properties testing and inspection equipment <sup>227</sup> .....	1982.. 635.2 1977.. 276.6 1972.. 106.3	24 19 25	35 31 39	54 51 64	78 78 86	249 (NA) (NA)
38293	General purpose instruments <sup>227</sup> .....	1982.. 365.2 1977.. 226.8 1972.. 103.8	30 34 50	40 45 64	58 62 84	80 83 98	341 (NA) (NA)
38294	Nuclear radiation detection and monitoring instruments <sup>228</sup> .....	1982.. 596.4 1977.. 344.2 1972.. 198.2	38 41 51	54 61 63	79 85 82	98 99 98	565 (NA) (NA)
38290	Measuring and controlling devices, n.e.c., n.s.k. ....	1982.. 165.6 1977.. 105.5 1972.. 112.4	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	(X) (NA) (NA)
3832-	Optical instruments and lenses <sup>230</sup> .....	1982.. 3 678.4 1977.. 1 299.7 1972.. 584.7 1967.. 451.9 1963.. 269.5 1958.. 115.5	25 28 38 43 37 38	34 39 49 55 49 55	52 59 63 70 69 73	72 77 77 85 86 87	273 (NA) (NA) (NA) (NA) (NA) (NA)
38324	Sighting, tracking, and fire control equipment .....	1982.. 505.4 1977.. 227.3	50 38	71 60	91 87	99+ 99	1 003 (NA)
38325	Optical instruments and lenses, n.e.c. ....	1982.. 922.8 1977.. 390.0	46 53	56 60	70 74	85 89	930 (NA)
38326	Analytical and scientific instruments, except optical <sup>213</sup> .....	1982.. 2 088.4 1977.. 604.5	28 40	43 57	63 79	87 94	332 (NA)
38320	Optical instruments and lens, n.s.k. ....	1982.. 161.8 1977.. 77.8 1972.. 57.2 1967.. 28.6 1963.. 5.7	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA)
3841-	Surgical and medical instruments (1967 product class 38410) .....	1982.. 4 271.9 1977.. 1 891.3 1972.. 987.3 1967.. 542.9 1963.. 290.6 1958.. 130.6	30 28 32 31 34 29	47 42 45 48 46 40	65 61 62 61 62 59	79 77 77 83 80 81	337 (NA) (NA) (NA) (NA) (NA) (NA)
38411	Surgical and medical instruments and apparatus .....	1982.. 3 686.1 1977.. 1 506.7	34 34	54 51	74 71	87 88	440 (NA)
38412	Hospital furniture .....	1982.. 270.0 1977.. 206.7	36 53	55 66	84 86	99 99+	598 (NA)
38410	Surgical and medical instruments, n.s.k. ....	1982.. 315.8 1977.. 177.9	(X) (X)	(X) (X)	(X) (X)	(X) (X)	(X) (NA)
3842-	Surgical appliances and supplies .....	1982.. 5 018.8 1977.. 2 413.0 1972.. 1 139.7 1967.. 691.3 1963.. 461.8 1958.. 362.0	28 33 35 36 39 41	37 43 45 45 49 50	52 57 60 60 62 64	68 73 75 75 77 77	312 (NA) (NA) (NA) (NA) (NA) (NA)
38421	Surgical appliances and supplies .....	1982.. 3 785.7 1977.. 1 773.0 1972.. 781.9 1967.. 475.0 1963.. 318.2 1958.. 256.6	36 43 49 49 52 53	46 54 61 61 63 62	62 71 78 75 77 74	79 86 90 87 87 87	503 (NA) (NA) (NA) (NA) (NA) (NA)
38423	Personal industrial safety devices .....	1982.. 874.2 1977.. 403.1 1972.. 226.1 1967.. 144.4 1963.. 97.4 1958.. 56.4	37 33 34 43 44 50	52 48 48 57 55 60	69 71 72 79 73 78	86 91 92 94 92 97	506 (NA) (NA) (NA) (NA) (NA) (NA)
38424	Electronic hearing aids .....	1982.. 109.2 1977.. 58.1 1972.. 50.0 1967.. 40.9 1963.. 35.3 1958.. 39.5 1954.. 29.0	62 59 67 60 63 64 78	88 87 90 82 85 86 93	100 100 100 97 (D) 98 99	(X) (X) 100 100 (D) 100 (NA)	1 198 (NA) (NA) (NA) (NA) (NA) (NA) (NA)

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Table 6. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>	
		Total (million dollars)	Percent accounted for by <sup>3</sup> —					
			4 largest companies	8 largest companies	20 largest companies	50 largest companies		
38	INSTRUMENTS AND RELATED PRODUCTS—Con.							
3842- 38420	Surgical appliances and supplies—Con. Surgical appliances and supplies, n.s.k.-----	1982... 1977... 1972... 1967... 1963... 1958...	249.5 178.8 81.7 31.1 11.0 9.6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)	
3843-	Dental equipment and supplies-----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	957.0 660.7 352.1 201.8 139.5 110.7 79.5	36 28 32 37 37 41 37	52 42 45 48 48 53 49	70 65 68 69 67 68 68	84 83 84 86 85 86 (NA)	
38431	Dental professional equipment and supplies <sup>231</sup> -----	1982...	567.9	47	67	84	95	758
38432	Dental laboratory equipment and supplies <sup>231</sup> -----	1982...	268.8	50	70	90	99	828
38430	Dental equipment and supplies, n.s.k. <sup>231</sup> -----	1982...	120.4	(X)	(X)	(X)	(X)	(X)
3851-	Ophthalmic goods-----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	1 081.1 844.3 480.9 377.5 244.1 168.0 136.5	38 42 50 44 45 47 47	50 53 60 53 57 58 56	70 66 73 67 74 71 72	86 81 86 81 88 85 (NA)	
38511	Ophthalmic fronts and temples-----	1982... 1977... 1972... 1967...	153.7 154.2 109.1 84.2	45 41 36 46	66 62 60 64	94 93 87 87	100 99+ (D) 99+	734 (NA) (NA) (NA)
38514	Glass ophthalmic focus lenses-----	1982... 1977...	155.1 132.6	50 56	80 81	99+ 95	(D) 99+	934 (NA)
38515	Plastics ophthalmic focus lenses-----	1982... 1977...	115.3 73.8	69 55	93 77	100 97	(X) 100	1 492 (NA)
38516	Contact lenses-----	1982... 1977...	214.9 117.7	76 87	91 92	98 96	100 (D)	2 594 (NA)
38517	Ophthalmic goods, n.e.c. (1977 product class 38513)-----	1982... 1977... 1972... 1967...	284.4 259.3 160.8 124.3	69 63 56 46	77 74 72 59	90 92 90 80	99+ 99+ 99+ 97	1 806 (NA) (NA) (NA)
38510	Ophthalmic goods, n.s.k.-----	1982... 1977... 1972... 1967...	144.0 106.7 76.6 34.8	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (NA) (NA) (NA)
3861-	Photographic equipment and supplies-----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	14 990.4 9 217.5 5 276.7 3 138.0 1 631.4 1 061.3 772.9	74 72 75 67 62 60 61	84 85 85 80 76 69 70	89 89 91 88 85 82 80	94 95 95 94 92 91 (NA)	2 167 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
38611	Still picture equipment-----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	1 473.3 925.8 616.4 484.8 223.6 179.4 170.7	71 66 67 53 51 48 54	78 76 77 68 66 61 64	88 89 90 86 83 81 79	96 98 98 97 83 93 (NA)	2 594 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
38612	Photocopying equipment-----	1982... 1977... 1972... 1967...	(D) (D) 1 466.8 620.2	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) 99+ (D)	(D) (D) 100 100	(D) (NA) (NA) (NA)
38613	Motion picture equipment-----	1982... 1977... 1972... 1967... 1963... 1958...	203.2 178.2 191.6 194.3 127.9 148.0	54 57 59 58 57 69	65 72 72 69 71 81	85 90 89 85 86 93	100 100 99 98 98 99	1 289 (NA) (NA) (NA) (NA) (NA) (NA)
38614	Microfilming, blueprinting, and whiteprinting equipment-----	1982... 1977... 1972... 1967...	466.0 240.2 137.5 53.6	71 73 80 75	89 86 89 94	99 98 98 99+	100 100 100 100	1 615 (NA) (NA) (NA)
38615	Sensitized film and plates, silver halide type-----	1982... 1977... 1972...	4 154.7 2 587.3 1 335.8	(D) 94 (D)	97 98 98	99+ 99+ 99+	100 100 100	(D) (NA) (NA)
38616	Sensitized paper and cloth, silver halide type-----	1982... 1977... 1972... 1967... 1963... 1958... 1954...	(D) (D) 384.0 238.7 191.3 124.0 78.8	(D) (D) (D) 89 83 84 85	(D) (D) 99 98 96 94 96	(D) (D) 100 100 100 100 100	(X) (X) (X) (X) (X) (X) (X)	(D) (NA) (NA) (NA) (NA) (NA) (NA) (NA)

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		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
38	INSTRUMENTS AND RELATED PRODUCTS—Con.						
3861- 38617	Photographic equipment and supplies—Con. Sensitized film, plates, paper, and cloth, except silver halide type --- 1982--	985.0	59	72	91	100	1 141
	1977--	443.1	57	70	90	100	(NA)
	1972--	326.4	65	82	96	100	(NA)
	1967--	193.5	70	89	98	100	(NA)
	1963--	128.1	63	77	93	100	(NA)
	1958--	82.1	62	84	95	100	(NA)
	1954--	47.3	65	77	95	(NA)	(NA)
38618	Prepared photographic chemicals ----- 1982--	966.8	69	81	94	99+	1 784
	1977--	634.3	74	89	98	100	(NA)
	1972--	268.2	80	88	98	100	(NA)
	1967--	148.3	84	92	98	100	(NA)
	1963--	74.3	80	91	97	100	(NA)
	1958--	35.9	71	83	94	99	(NA)
	1954--	19.8	73	85	98	(NA)	(NA)
38619	X-ray film and plates ----- 1982--	(D)	(D)	(D)	(X)	(X)	(D)
	1977--	515.3	99	100	(X)	(X)	(NA)
	1972--	297.6	98	100	(X)	(X)	(NA)
38610	Photographic equipment and supplies, n.s.k. ----- 1982--	(D)	(X)	(X)	(X)	(X)	(X)
	1977--	(D)	(X)	(X)	(X)	(X)	(NA)
	1972--	160.7	(X)	(X)	(X)	(X)	(NA)
	1967--	119.9	(X)	(X)	(X)	(X)	(NA)
	1963--	78.4	(X)	(X)	(X)	(X)	(NA)
	1958--	38.3	(X)	(X)	(X)	(X)	(NA)
3873-	Watches, clocks, and watchcases (1967 industries 3871 and 3872) <sup>232</sup> ----- 1982--	1 121.8	46	58	77	91	1 244
	1977--	1 332.0	51	59	76	91	(NA)
	1972--	864.7	52	64	83	95	(NA)
	1967--	663.5	43	59	84	96	(NA)
	1963--	406.2	42	62	87	96	(NA)
	1958--	291.5	45	69	87	96	(NA)
	1954--	293.4	44	66	98	(NA)	(NA)
38732	Clocks, timing mechanisms, time switches, and clock parts <sup>233</sup> ----- 1982--	475.1	30	51	81	96	430
38734	Watches with imported movements or modules (1967 product class 38714) ----- 1982--	457.9	88	97	100	(X)	(D)
	1977--	300.7	74	90	(D)	100	(NA)
	1972--	192.1	62	85	99	100	(NA)
	1967--	190.6	56	83	99+	100	(NA)
	1963--	112.8	64	90	99+	100	(NA)
	1958--	83.7	71	90	99	100	(NA)
	1954--	96.8	75	88	98	(NA)	(NA)
38736	Watches with domestic movements or modules <sup>233</sup> ----- 1982--	58.4	(D)	(D)	(D)	(X)	(D)
38737	Watchcases and parts for watchcases (1967 product class 38720) ----- 1982--	70.5	69	93	100	(X)	1 570
	1977--	67.2	66	88	(D)	100	(NA)
	1972--	53.0	72	86	99	100	(NA)
	1967--	44.8	58	73	94	100	(NA)
	1963--	29.4	50	66	90	100	(NA)
	1958--	27.8	48	65	85	99	(NA)
	1954--	34.5	42	59	83	(NA)	(NA)
38730	Watches, clocks, and watchcases, n.s.k. <sup>11</sup> ----- 1982--	60.0	(X)	(X)	(X)	(X)	(X)
	1977--	59.8	(X)	(X)	(X)	(X)	(NA)
	1972--	20.7	(X)	(X)	(X)	(X)	(NA)
39	MISCELLANEOUS MANUFACTURING INDUSTRIES						
3911-	Jewelry, precious metal ----- 1982--	2 823.2	15	20	30	44	79
	1977--	1 907.7	13	19	30	44	(NA)
	1972--	983.7	13	18	28	43	(NA)
	1967--	633.2	14	20	30	42	(NA)
	1963--	400.4	17	24	34	46	(NA)
	1958--	287.1	17	23	34	47	(NA)
	1954--	238.5	15	22	34	(NA)	(NA)
39111	Jewelry, made of platinum metals and karat gold ----- 1982--	2 076.5	18	24	36	53	118
	1977--	1 251.5	21	28	41	57	(NA)
	1972--	657.1	17	24	37	55	(NA)
	1967--	426.2	18	25	35	50	(NA)
	1963--	286.3	22	28	38	51	(NA)
	1958--	195.2	23	30	41	53	(NA)
	1954--	155.5	19	27	39	(NA)	(NA)
39112	Other jewelry, made of precious metals ----- 1982--	411.0	18	29	49	72	170
	1977--	353.0	23	35	52	72	(NA)
	1972--	180.0	22	33	53	78	(NA)
	1967--	125.8	27	38	55	77	(NA)
	1963--	93.7	28	38	54	74	(NA)
	1958--	74.3	24	36	52	72	(NA)
	1954--	72.6	27	39	54	(NA)	(NA)
39110	Jewelry, precious metal, n.s.k. ----- 1982--	335.7	(X)	(X)	(X)	(X)	(X)
	1977--	303.2	(X)	(X)	(X)	(X)	(NA)
	1972--	146.6	(X)	(X)	(X)	(X)	(NA)
	1967--	81.2	(X)	(X)	(X)	(X)	(NA)
	1963--	20.4	(X)	(X)	(X)	(X)	(NA)
	1958--	17.6	(X)	(X)	(X)	(X)	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
39	MISCELLANEOUS MANUFACTURING INDUSTRIES— Con.						
3914-	Silverware and plated ware-----1982--	489.3	58	72	85	93	1 003
	1977--	403.2	51	67	82	91	(NA)
	1972--	327.9	51	68	82	93	(NA)
	1967--	305.4	55	67	81	93	(NA)
	1963--	211.9	54	64	79	90	(NA)
	1958--	178.8	50	65	77	87	(NA)
	1954--	188.1	56	69	81	(NA)	(NA)
39141	Hollowware-----1982--	208.2	40	56	79	94	606
	1977--	175.2	44	64	90	100	(NA)
	1972--	152.7	40	60	78	95	(NA)
	1967--	126.3	38	51	78	96	(NA)
	1963--	93.9	36	50	70	89	(NA)
	1958--	74.3	35	48	71	92	(NA)
39142	Flatware-----1982--	266.1	75	93	99 +	100	1 901
	1977--	193.2	68	87	98	100	(NA)
	1972--	165.3	65	88	99	100	(NA)
	1967--	166.8	73	90	99	100	(NA)
	1963--	113.2	72	90	98	100	(NA)
	1958--	97.1	72	91	98	100	(NA)
39140	Silverware and plated ware, n.s.k.-----1982--	15.1	(X)	(X)	(X)	(X)	(X)
	1977--	34.7	(X)	(X)	(X)	(X)	(NA)
	1972--	9.9	(X)	(X)	(X)	(X)	(NA)
	1967--	12.3	(X)	(X)	(X)	(X)	(NA)
	1963--	4.8	(X)	(X)	(X)	(X)	(NA)
	1958--	7.4	(X)	(X)	(X)	(X)	(NA)
3915-	Jewelers' materials and lapidary work-----1982--	814.4	24	36	59	78	269
	1977--	726.0	21	32	50	71	(NA)
	1972--	296.7	27	37	58	79	(NA)
39151	Jewelers' findings and materials (1967 product class 39120)-----1982--	494.4	31	46	73	91	494
	1977--	305.5	29	42	66	85	(NA)
	1972--	163.3	25	37	56	88	(NA)
	1967--	115.6	26	39	60	81	(NA)
	1963--	70.5	28	42	62	81	(NA)
	1958--	56.8	(NA)	(NA)	(NA)	(NA)	(NA)
	1954--	68.1	38	49	63	(NA)	(NA)
39152	Lapidary work and diamond cutting and polishing (1967 product class 39130)-----1982--	147238.9	57	75	94	99 +	963
	1977--	147305.6	(NA)	(NA)	(NA)	(NA)	(NA)
	1972--	147164.4	(NA)	(NA)	(NA)	(NA)	(NA)
	1967--	14797.6	(NA)	(NA)	(NA)	(NA)	(NA)
	1963--	14767.7	(NA)	(NA)	(NA)	(NA)	(NA)
	1958--	14743.3	(NA)	(NA)	(NA)	(NA)	(NA)
39150	Jewelers' materials and lapidary work, n.s.k.-----1982--	81.0	(X)	(X)	(X)	(X)	(X)
	1977--	114.9	(X)	(X)	(X)	(X)	(NA)
	1972--	6.5	(X)	(X)	(X)	(X)	(NA)
3931-	Musical instruments-----1982--	876.5	32	52	73	86	410
	1977--	878.9	31	52	78	90	(NA)
	1972--	526.3	35	56	80	92	(NA)
	1967--	401.2	36	55	77	89	(NA)
	1963--	319.4	37	52	72	87	(NA)
	1958--	242.1	40	53	71	87	(NA)
39311	Pianos-----1982--	194.8	57	91	100	(X)	1 197
	1977--	180.6	64	90	100	(X)	(NA)
	1972--	107.4	66	88	100	(X)	(NA)
	1967--	91.2	62	88	100	(X)	(NA)
	1963--	87.7	62	85	100	(X)	(NA)
	1958--	63.7	53	76	100	(X)	(NA)
39312	Organs-----1982--	177.7	55	85	99	100	1 042
	1977--	295.8	53	81	99	100	(NA)
	1972--	188.3	56	86	99	100	(NA)
	1967--	126.2	57	81	97	100	(NA)
	1963--	107.3	58	78	97	100	(NA)
	1958--	79.4	61	79	97	99	(NA)
	1954--	37.5	78	90	99	(NA)	(NA)
39313	Piano and organ parts-----1982--	94.1	60	77	98	100	1 237
	1977--	86.2	64	82	99	100	(NA)
	1972--	54.6	64	82	97	100	(NA)
	1967--	46.0	50	67	89	100	(NA)
	1963--	42.3	48	71	93	100	(NA)
	1958--	51.1	74	82	93	99	(NA)
	1954--	38.1	71	81	94	(NA)	(NA)
39314	Other musical instruments and parts-----1982--	346.4	42	58	80	94	705
	1977--	255.5	41	64	87	99	(NA)
	1972--	156.0	40	63	88	98	(NA)
	1967--	123.4	46	63	81	96	(NA)
	1963--	77.7	32	51	73	90	(NA)
	1958--	48.0	29	43	64	86	(NA)
	1954--	36.4	27	40	63	(NA)	(NA)
39310	Musical instruments, n.s.k.-----1982--	63.6	(X)	(X)	(X)	(X)	(X)
	1977--	60.8	(X)	(X)	(X)	(X)	(NA)
	1972--	19.9	(X)	(X)	(X)	(X)	(NA)
	1967--	14.4	(X)	(X)	(X)	(X)	(NA)
	1963--	4.4	(X)	(X)	(X)	(X)	(NA)

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
39	MISCELLANEOUS MANUFACTURING INDUSTRIES— Con.						
39420	Dolls and stuffed toy animals..... 1982...	523.6	38	51	73	91	650
	..... 1977...	508.2	47	58	74	90	(NA)
	..... 1972...	277.9	31	42	62	83	(NA)
	..... 1967...	217.0	27	39	60	78	(NA)
	..... 1963...	190.4	27	37	53	69	(NA)
	..... 1958...	161.9	14	23	39	61	(NA)
	..... 1954...	131.9	16	26	41	(NA)	(NA)
3944-	Games, toys, and children's vehicles..... 1982...	3 976.9	39	57	71	84	510
	..... 1977...	2 333.2	27	39	58	77	(NA)
	..... 1972...	1 466.5	34	45	60	76	(NA)
39443	Baby carriages and children's vehicles, except bicycles (1967 product class 39430)..... 1982...	315.1	49	67	87	100	800
	..... 1977...	211.2	55	74	93	100	(NA)
	..... 1972...	125.5	53	76	95	100	(NA)
	..... 1967...	99.6	48	68	91	100	(NA)
	..... 1963...	82.7	41	61	85	99	(NA)
	..... 1958...	72.9	39	61	85	99	(NA)
	..... 1954...	64.5	41	59	81	(NA)	(NA)
39444	Toys, excluding games, hobbies, and electronic toys <sup>11</sup> ..... 1982...	1 329.5	38	55	77	91	538
	..... 1977...	1 036.0	38	53	76	92	(NA)
39445	Hobbies and models <sup>11</sup> ..... 1982...	377.0	35	53	77	93	489
	..... 1977...	309.3	42	63	86	99	(NA)
39446	Nonelectronic games <sup>234</sup> ..... 1982...	399.1	66	78	92	99+	1 482
39447	Electronic games and toys <sup>234</sup> ..... 1982...	1 347.8	87	99	99+	100	2 388
39440	Games, toys, and children's vehicles, n.s.k. .... 1982...	208.5	(X)	(X)	(X)	(X)	(X)
	..... 1977...	164.6	(X)	(X)	(X)	(X)	(NA)
3949-	Sporting and athletic goods, n.e.c. .... 1982...	3 160.8	15	26	41	59	120
	..... 1977...	2 216.9	18	26	39	54	(NA)
	..... 1972...	1 529.0	26	34	46	61	(NA)
	..... 1967...	836.4	24	31	42	58	(NA)
	..... 1963...	655.5	33	39	47	60	(NA)
	..... 1958...	519.9	34	42	51	63	(NA)
	..... 1954...	302.7	19	28	42	(NA)	(NA)
39491	Fishing tackle and equipment..... 1982...	341.9	37	55	71	85	514
	..... 1977...	270.1	29	41	64	83	(NA)
	..... 1972...	167.7	26	41	64	84	(NA)
	..... 1967...	111.1	31	45	65	83	(NA)
	..... 1963...	96.9	26	38	58	75	(NA)
	..... 1958...	75.8	25	39	60	80	(NA)
39492	Golf equipment..... 1982...	644.0	44	62	89	98	682
	..... 1977...	385.1	42	62	88	98	(NA)
	..... 1972...	276.7	46	65	90	99	(NA)
	..... 1967...	158.6	50	66	87	98	(NA)
39494	Playground, gymnasium, and exercise equipment <sup>11</sup> ..... 1982...	531.4	33	48	75	93	519
	..... 1977...	257.8	31	47	73	93	(NA)
	..... 1972...	107.4	38	61	85	99	(NA)
39495	Other sporting and athletic goods, n.e.c. <sup>11</sup> ..... 1982...	1 314.1	20	33	52	71	193
	..... 1977...	1 060.8	20	31	48	69	(NA)
	..... 1972...	801.1	34	43	57	75	(NA)
39490	Sporting and athletic goods, n.e.c., n.s.k. .... 1982...	329.4	(X)	(X)	(X)	(X)	(X)
	..... 1977...	243.4	(X)	(X)	(X)	(X)	(NA)
	..... 1972...	175.3	(X)	(X)	(X)	(X)	(NA)
	..... 1967...	96.4	(X)	(X)	(X)	(X)	(NA)
	..... 1963...	33.2	(X)	(X)	(X)	(X)	(NA)
	..... 1958...	45.4	(X)	(X)	(X)	(X)	(NA)
3951-	Pens and mechanical pencils <sup>235</sup> ..... 1982...	773.8	42	63	77	91	637
	..... 1977...	562.9	45	59	76	91	(NA)
	..... 1972...	311.7	46	62	79	93	(NA)
	..... 1967...	210.8	41	55	73	92	(NA)
	..... 1963...	177.7	43	54	71	90	(NA)
	..... 1958...	147.2	45	58	74	91	(NA)
	..... 1954...	118.1	55	67	80	(NA)	(NA)
39511	Ball point and roller pens <sup>236</sup> ..... 1982...	383.5	56	78	90	99+	955
39512	Markers, fine point and broad tipped <sup>236</sup> ..... 1982...	156.9	60	78	95	100	1 384
39513	Other pens, mechanical pencils, desk sets, and pen and pencil parts <sup>236</sup> ..... 1982...	204.7	49	69	91	99+	860
39510	Pens, markers, mechanical pencils, and pen points (refillable and nonrefillable), n.s.k. <sup>236</sup> ..... 1982...	28.7	(X)	(X)	(X)	(X)	(X)
3952-	Lead pencils and art goods..... 1982...	352.7	43	58	75	90	683
	..... 1977...	268.1	39	55	73	92	(NA)
	..... 1972...	173.7	39	54	73	90	(NA)
	..... 1967...	133.2	40	54	75	92	(NA)
	..... 1963...	107.5	36	50	69	88	(NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
39	MISCELLANEOUS MANUFACTURING INDUSTRIES— Con.						
3952-	Lead pencils and art goods—Con.						
	1958..	89.5	42	57	76	93	(NA)
39521	Wood-cased pencils, crayons, and chalk.....	1982.. 183.5	66	84	98	100	1 438
	1977.. 90.6	50	68	93	100	(NA)	
	1972.. 63.2	52	71	92	100	(NA)	
	1967.. 73.6	53	72	92	100	(NA)	
	1963.. 65.3	50	69	89	99+	(NA)	
	1958.. 65.3	55	72	92	99	(NA)	
	1954.. 51.0	43	63	87	(NA)	(NA)	
39522	Artists' equipment .....	1982.. 145.5	44	60	83	99	690
	1977.. 163.9	59	71	90	99+	(NA)	
	1972.. 100.8	55	71	88	100	(NA)	
	1967.. 53.8	40	63	82	99	(NA)	
	1963.. 40.3	32	50	74	94	(NA)	
	1958.. 24.1	34	51	73	93	(NA)	
	1954.. 25.9	36	50	75	(NA)	(NA)	
39520	Lead pencils, crayons, and artists' materials, n.s.k. ....	1982.. 23.7	(X)	(X)	(X)	(X)	(X)
	1977.. 13.6	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 9.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1967.. 5.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1963.. 1.9	(X)	(X)	(X)	(X)	(X)	(NA)
39530	Hand stamps, stencils, and other marking devices <sup>235</sup> .....	1982.. 326.9	20	29	44	59	177
	1977.. 215.9	21	30	44	60	(NA)	
	1972.. 163.4	27	34	45	59	(NA)	
	1967.. 130.8	27	38	50	64	(NA)	
	1963.. 107.1	33	41	52	63	(NA)	
	1958.. 58.7	22	30	42	57	(NA)	
	1954.. 47.7	17	25	38	(NA)	(NA)	
3955-	Carbon paper and inked ribbons .....	1982.. 793.6	43	57	77	93	753
	1977.. 488.9	47	64	85	98	(NA)	
	1972.. 275.1	35	53	79	98	(NA)	
	1967.. 221.5	31	48	74	96	(NA)	
	1963.. 161.3	32	49	74	95	(NA)	
	1958.. 119.1	27	42	69	92	(NA)	
	1954.. 91.1	30	48	75	(NA)	(NA)	
39551	Inked ribbons, all types .....	1982.. 485.3	59	74	92	100	1 606
	1977.. 246.9	63	79	97	100	(NA)	
	1972.. 102.4	51	74	97	100	(NA)	
39552	Carbon paper, stencil paper, etc. ....	1982.. 282.0	49	63	85	100	861
	1977.. 220.2	62	79	96	100	(NA)	
	1972.. 157.1	46	62	87	100	(NA)	
39550	Carbon paper, stencil paper, and inked ribbons, n.s.k. ....	1982.. 26.3	(X)	(X)	(X)	(X)	(X)
	1977.. 21.8	(X)	(X)	(X)	(X)	(X)	(NA)
	1972.. 15.6	(X)	(X)	(X)	(X)	(X)	(NA)
39610	Costume jewelry and costume novelties .....	1982.. 948.6	21	31	48	63	199
	1977.. 781.5	17	26	41	58	(NA)	
	1972.. 441.4	13	21	35	53	(NA)	
	1967.. 338.2	13	21	35	53	(NA)	
	1963.. 256.7	13	20	33	50	(NA)	
	1958.. 236.3	13	19	30	45	(NA)	
	1954.. 235.2	13	20	30	(NA)	(NA)	
39620	Feathers, plumes, and artificial flowers .....	1982.. 238.0	34	45	65	82	433
	1977.. 160.1	34	46	64	81	(NA)	
	1972.. 101.8	27	38	56	75	(NA)	
	1967.. 86.3	18	28	46	68	(NA)	
	1963.. 59.3	13	23	40	61	(NA)	
	1958.. 59.5	12	20	36	56	(NA)	
	1954.. 48.6	9	16	33	(NA)	(NA)	
39630	Buttons and parts .....	1982.. 142.5	29	48	74	91	400
	1977.. 106.2	32	47	69	89	(NA)	
	1972.. 103.0	25	40	65	85	(NA)	
	1967.. 83.8	22	34	55	77	(NA)	
	1963.. 81.9	22	33	52	75	(NA)	
	1958.. 70.8	19	29	47	73	(NA)	
	1954.. 64.0	19	28	46	(NA)	(NA)	
3964-	Needles, pins, and fasteners.....	1982.. 606.9	39	49	66	83	454
	1977.. 633.6	48	58	70	84	(NA)	
	1972.. 551.9	45	56	70	85	(NA)	
	1967.. 381.4	46	56	69	84	(NA)	
	1963.. 315.2	36	47	63	79	(NA)	
	1958.. 220.8	37	46	64	80	(NA)	
	1954.. 177.0	28	41	58	(NA)	(NA)	
39641	Zipper and slide in fasteners .....	1982.. 200.8	70	81	94	100	1 452
	1977.. 295.0	71	84	95	100	(NA)	
	1972.. 254.4	71	78	90	99	(NA)	
	1967.. 201.5	66	74	87	98	(NA)	
	1963.. 143.2	59	68	81	94	(NA)	
	1958.. 87.3	64	78	91	100	(NA)	
39642	Needles, pins, fasteners (except slide), and similar notions .....	1982.. 364.4	25	40	69	94	327
	1977.. 278.1	43	55	75	97	(NA)	
	1972.. 265.7	39	54	77	96	(NA)	
	1967.. 153.8	42	60	81	98	(NA)	
	1963.. 155.7	35	50	73	93	(NA)	
	1958.. 112.0	32	48	71	92	(NA)	

See footnotes at end of table.

**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

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SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
39	MISCELLANEOUS MANUFACTURING INDUSTRIES— Con.						
3964- 39640	Needles, pins, and fasteners—Con. Needles, pins, and fasteners, n.s.k. -----	1982... 41.7 1977... 60.6 1972... 31.8 1967... 26.1 1963... 16.3 1958... 21.6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3991-	Brooms and brushes -----	1982... 763.7 1977... 620.8 1972... 391.2 1967... 295.1 1963... 247.7 1958... 208.1 1954... 180.8	17 15 20 20 16 15 16	28 25 33 31 27 26 27	47 46 50 49 46 43 44	70 70 69 68 66 60 (NA)	157 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39911	Brooms -----	1982... 134.2 1977... 83.0 1972... 47.0 1967... 37.5 1963... 38.0 1958... 33.7 1954... 36.7	30 30 24 18 11 11 13	46 41 37 30 21 20 23	66 63 61 52 40 37 39	90 87 87 79 64 58 (NA)	358 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39912	Paint and varnish brushes, rollers, and pads -----	1982... 223.0 1977... 184.5 1972... 112.9 1967... 88.6 1963... 73.6 1958... 60.7 1954... 56.8	47 45 45 37 33 31 25	64 62 62 54 50 48 43	89 88 87 80 78 72 69	100 99+ 100 99+ 98 97 (NA)	796 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39913	Other brushes -----	1982... 372.8 1977... 309.5 1972... 199.0 1967... 142.3 1963... 126.0 1958... 103.4 1954... 84.7	27 23 28 34 30 29 29	43 38 42 50 48 45 48	64 63 63 72 68 64 65	87 86 85 90 85 84 (NA)	307 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39910	Brooms and brushes, n.s.k. -----	1982... 33.7 1977... 43.8 1972... 32.4 1967... 26.8 1963... 10.1 1958... 10.3 1954... 2.6	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA) (NA)
3993-	Signs and advertising displays -----	1982... 2 549.3 1977... 1 606.9 1972... 1 098.5 1967... 800.6 1963... 583.8 1958... 407.9 1954... 329.9	5 6 5 5 5 4 6	9 10 8 8 8 7 9	16 16 16 16 14 14 15	28 28 27 27 25 24 (NA)	20 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39931	Electric signs -----	1982... 683.4 1977... 349.8 1972... 198.8 1967... 176.5 1963... 144.5 1958... 99.7 1954... 82.1	17 24 17 17 15 15 15	29 36 29 27 23 21 22	45 53 49 46 39 32 34	64 66 68 65 53 45 (NA)	148 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39932	Nonelectric signs -----	1982... 1 001.1 1977... 615.6 1972... 454.5 1967... 349.4 1963... 302.3 1958... 199.5 1954... 178.5	8 8 11 9 5 6 6	13 13 16 14 10 10 11	26 26 28 24 19 20 21	45 44 44 39 32 37 (NA)	50 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39933	Advertising specialties -----	1982... 268.9 1977... 262.5 1972... 155.7 1967... 115.0 1963... 83.7 1958... 64.4 1954... 42.2	17 14 18 16 16 18 19	29 22 28 26 26 26 29	49 37 44 43 42 41 48	71 58 68 66 63 64 (NA)	159 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39930	Signs and advertising displays, n.s.k. -----	1982... 596.9 1977... 379.0 1972... 289.5 1967... 159.8 1963... 53.3 1958... 50.2	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
3995-	Burial caskets (1967 product group 3994-) <sup>237</sup> -----	1982... 672.8 1977... 494.8 1972... 388.1 1967... 288.0 1963... 267.4 1958... 217.7	53 36 25 18 17 19	61 47 34 25 24 26	72 61 48 40 39 40	84 74 63 56 55 54	1 293 (NA) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>					Herfindahl- Hirschman Index for 50 largest companies <sup>4</sup>
		Total (million dollars)	Percent accounted for by <sup>3</sup> —				
			4 largest companies	8 largest companies	20 largest companies	50 largest companies	
39	MISCELLANEOUS MANUFACTURING INDUSTRIES— Con.						
3995-	Burial caskets (1967 product group 3994-) <sup>237</sup> —Con.						
	1954..	164.4	17	24	36	(NA)	(NA)
39951	Metal caskets and coffins, lined and trimmed (adult) (1967 product class 39941) <sup>238</sup>	1982.. 429.5 1977.. 298.1 1972.. 211.2 1967.. 133.7 1963.. 123.6 1958.. 85.2	64 49 38 29 24 28	74 62 48 39 37 41	84 75 63 55 54 56	95 87 79 72 70 72	2 263 (NA) (NA) (NA) (NA) (NA) (NA)
39952	Wood caskets and coffins, lined and trimmed (adult) (1967 product class 39942) <sup>238</sup>	1982.. 115.1 1977.. 85.6 1972.. 68.8 1967.. 59.8 1963.. 67.3 1958.. 70.0	41 34 25 24 20 23	55 45 37 33 28 31	76 64 52 48 42 42	94 84 74 69 61 58	678 (NA) (NA) (NA) (NA) (NA) (NA)
39953	Other caskets, coffins, and metal vaults <sup>239</sup>	1982.. 87.7 1977.. 79.2 1972.. 67.9	73 48 43	82 60 58	95 78 76	99 95 93	2 171 (NA) (NA)
39950	Burial caskets, n.s.k. (1967 product class 39440)	1982.. 40.5 1977.. 31.9 1972.. 40.2 1967.. 25.8 1963.. 12.4 1958.. 9.3	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA) (NA)
39960	Resilient floor covering (1967 product classes 39961, 39962, and 39960) <sup>11</sup>	1982.. 535.4 1977.. 561.3 1972.. 300.4 1967.. 191.6 1963.. 168.1 1958.. 151.9	98 88 90 86 85 79	99+ 97 97 97 (D) 96	100 (D) 100 99+ (D) 99	(X) 100 (X) 100 100 100	(D) (NA) (NA) (NA) (NA) (NA) (NA)
3999-	Manufacturing industries, n.e.c. <sup>240</sup>	1982.. 3 881.8 1977.. 2 589.0 1972.. 1 461.4 1967.. 922.4	24 14 5 8	31 21 17 15	41 32 27 27	52 44 40 41	227 (NA) (NA) (NA)
39991	Chemical fire-extinguishing equipment and parts	1982.. 333.5 1977.. 204.9 1972.. 126.3 1967.. 94.6 1963.. 52.3 1958.. 46.8	75 66 66 69 72 58	93 88 83 88 89 79	99+ 99+ 99 98 97 97	100 100 100 100 100 99	1 910 (NA) (NA) (NA) (NA) (NA) (NA)
39992	Coin-operated amusement machines	1982.. 1 086.9 1977.. 242.2 1972.. 91.1 1967.. 47.7 1963.. 30.0 1958.. 39.2 1954.. 47.7	77 92 90 92 83 79 79	93 98 99 99+ 99 95 93	99 100 100 100 100 99 99	100 (X) (X) (X) (X) (X) 100 (NA)	2 386 (NA) (NA) (NA) (NA) (NA) (NA) (NA)
39993	Matches	1982.. 97.1 1977.. 105.5 1972.. 81.5 1967.. 66.3	76 71 73 72	99+ 91 94 97	100 100 100 100	(X) (X) (X) (X)	1 685 (NA) (NA) (NA)
39994	Candles	1982.. 257.6 1977.. 160.3 1972.. 100.8 1967.. 55.1	35 33 35 37	60 55 54 54	85 77 81 81	98 95 98 99+	539 (NA) (NA) (NA)
39995	Lampshades	1982.. 41.8 1977.. 51.4 1972.. 36.9 1967.. 27.4	34 32 38 33	53 49 55 45	79 72 77 68	100 94 99 97	469 (NA) (NA) (NA) (NA)
39996	Furs, dressed and dyed <sup>241</sup>	1982.. 96.7 1977.. 76.2 1972.. 42.3 1967.. 39.8	40 42 29 37	59 58 43 59	87 81 62 90	100 99 91 100	629 (NA) (NA) (NA) (NA)
39997	Umbrellas, parasols, and canes	1982.. 64.9 1977.. 36.0 1972.. 37.8 1967.. 40.3	53 41 45 35	75 64 66 51	97 96 94 79	100 100 100 99+	1 093 (NA) (NA) (NA) (NA)
39999	Miscellaneous fabricated products, n.e.c.	1982.. 1 028.8 1977.. 1 086.3 1972.. 628.2 1967.. 390.5 1963.. 327.6 1958.. 271.2	20 25 20 14 13 10	28 35 26 21 21 18	41 47 39 33 34 30	58 63 55 51 51 44	158 (NA) (NA) (NA) (NA) (NA) (NA)
39990	Manufacturing industries, n.e.c., n.s.k.	1982.. 874.6 1977.. 626.1 1972.. 316.6 1967.. 160.9 1963.. 62.0	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (NA) (NA) (NA) (NA) (NA)

See footnotes at end of table.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

<sup>1</sup>Product classes (five-digit codes) and product groups (four-digit codes) are assigned to the industry to which they are primary. Products which are primary to 2 industries or more are split according to the industry code of the establishment producing them.

<sup>2</sup>Represents for each product class or group the total value shipped by all producers in all industries. The four-digit product group represents the total shipments by all producers of the products assigned the code with the same first four digits. For products primary to more than one industry, only the amount produced by plants with the same industry code is included. Thus, the total value of products of meat packing plants includes all fresh meats but only those prepared meats (20116, 20117, 20118) processed in plants classified in industry 2011. It does not include such products made elsewhere (20136, 20137, 20138).

<sup>3</sup>Company affiliation is determined from census reports and public records. The value of shipments of products falling within each five-digit class or four-digit group was aggregated for plants under common ownership, and company totals were derived to determine the largest producers. Thus, the same company may contribute to total value of shipments in more than one product class or group.

<sup>4</sup>The Herfindahl-Hirschman Index is a new item for the 1982 concentration publication and will not be available for prior years. The Herfindahl-Hirschman Index is a truncated index; it is the squares of the individual company ratios summed across the leading 50 companies or the complete universe whichever is lower. It is calculated by squaring the concentration ratio for each company and summing those squares to a cumulative total. The cumulative total (sum of the squares) is the Herfindahl-Hirschman Index. See the Explanatory Text for further discussion on the index.

<sup>5</sup>By definition, this product class is limited to the products produced by establishments classified in the industry having the same code as the first four digits of the product code. Appreciable amounts are also made in the other product classes referred to in the product description. The total value of shipments and the percent accounted for by large companies shown here are based exclusively on the products primary to this industry. See table 7 for the value of such products shipped from all establishments.

<sup>6</sup>Comparability of this industry has changed slightly as a result of the 1972 SIC revision. The change is estimated to be less than 3 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.

<sup>7</sup>Prior to 1982, product class 2011A was not a separate product class but collected as part of product class 20110. However, the shipments data were able to be shown separately in previous concentration publications.

<sup>8</sup>In 1982, collagen sausage casings were in industry 2013. 1977 Product Class 20139, Natural Sausage Casings, was reclassified as 1982 product class 2013A.

<sup>9</sup>1977 data for natural sausage casings may not be comparable to prior years data because collagen casings were included with synthetic meat and sausage casings in Industry 3079, Miscellaneous Plastics Products, for 1977.

<sup>10</sup>In 1982, old product class 20130 was reclassified as product classes 2013B and 20130.

<sup>11</sup>For historic data, see 1977 Census of Manufactures Subject Series, MC77-SR-9, Concentration Ratios in Manufacturing. Concentration ratios are also published for 1977 in Volume I, Subject Statistics, of the clothbound volumes.

<sup>12</sup>In 1982, old Product Classes 20221, Natural Cheese, Except Cottage Cheese, and 20222, Process Cheese and Related Products, were reclassified as product classes 20223, 20224, and 20225.

<sup>13</sup>In 1982, old Product Classes 20231, Dry Milk Products; 20232, Canned Milk Products (Consumer Type Cans); and 20233, Concentrated Milk, Shipped in Bulk, were reclassified as product classes, 20235, 20236, 20237, and 20239.

<sup>14</sup>In 1982, old Product Class 20264, Buttermilk, Chocolate Drinks, and Other Flavored Milk Products, was reclassified as product classes 20265 and 20266.

<sup>15</sup>Represents value of production rather than value of shipments.

<sup>16</sup>In 1982, old Product Class 20334, Canned Fruit Juices, Nectars, and Concentrates, was reclassified as product classes 2033A and 2033B.

<sup>17</sup>The data for Product Class 20370, Frozen Fruits and Vegetables, N.S.K., are included with Product Class 20380, Frozen Specialties, N.S.K.

<sup>18</sup>In 1982, old Product Class 20460, Wet Corn Milling, was reclassified as product classes 20461, 20462, 20463, 20464, and 20460. The new four-digit product group 2046- is comparable to the old five-digit product class 20460, and prior years data are shown.

<sup>19</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system.

<sup>20</sup>In 1982, old Product Class 20471, Dog and Cat Food, was reclassified as product classes 20473, 20474, and 20475 (pt.); old Product Class 20472, Other Pet and Specialty Food, was split into 20475 (pt.) and 20476.

<sup>21</sup>Includes unknown amounts of pet food manufactures.

<sup>22</sup>In 1982, old Product Class 20658, Confectionery Products, N.E.C., was reclassified as product classes 20657 and 20659.

<sup>23</sup>For 1963, the formerly separate Industries 2094, Grease and Tallow; and 2095, Animal and Marine Oil Products, Including Fats; were combined as Industry 2094, Animal and Marine Fats and Oils, Including Grease and Tallow. The 1958 value of shipments figures for industries 2094 and 2095 have been combined and the shares accounted for by the 4 and 8 largest companies recomputed on a basis comparable to 1963.

<sup>24</sup>In 1972, product class 20820 was reclassified as product classes 20821, 20822, 20823, 20824, and 20820. The new four-digit product group 2082- is comparable to the old five-digit product class 20820, and the prior years data are shown.

<sup>25</sup>The total value of shipments figures contain substantial duplication resulting from the fact that some of the products shipped are used as materials, parts, or components in the manufacture of other products in the same product class or product group. The effect of this duplication on the concentration ratios is unknown.

<sup>26</sup>In 1982, old Product Class 20860, Bottled and Canned Soft Drinks, was reclassified as product classes 20861, 20862, and 20860. The new four-digit product group 2086- is comparable to the old five-digit product class 20860, and prior years data are shown.

<sup>27</sup>Data prior to 1977 are not directly comparable. A total of 388 establishments were added to industry 2092 in 1977. In prior years, the additional establishments were erroneously listed in the administrative-record file as nonmanufacturing locations. The impact in 1977 of the additional establishments was as follows: Product class 2092- increased 24 percent, 20922 increased 224 percent, 20923 and 20924 each increased 10 percent, and 20920 increased 28 percent.

<sup>28</sup>In 1963, Industry 2099, Food Preparations, N.E.C., was redefined to exclude Product Class 20995, Roasted Coffee, which was made a separate industry, 2095. Concentration ratios for industry 2099 are not available for 1958 on a revised basis.

<sup>29</sup>In 1982, old Product Class 20980, Macaroni, Spaghetti, and Noodles, was reclassified as product classes 20981, 20982, and 20980. The new four-digit product group 2098- is comparable to the old five-digit product class 20980, and prior years data are shown.

<sup>30</sup>In 1982, old Product Class 20999, Other Food Preparations, N.E.C., was reclassified as product classes 2099A (pt.), 2099B, and 2099C. Old Product Class 20990, Miscellaneous Food, N.S.K., was reclassified as 2099A (pt.) and 20990.

<sup>31</sup>In 1982, old Product Class 21410, Reconstituted Tobacco and Tobacco Stemming and Redrying, N.S.K., was reclassified as product classes 21413 and 21410.

<sup>32</sup>In 1982, old Product Classes 22118, Cotton Sheets and Pillowcases (Made in Weaving Mills) and 22110, Other Fabricated Cotton Textile Products Made in Weaving Mills, Including Fabrics, N.S.K., were reclassified as product classes 2211A and 22110. As a result, cotton sheets and pillowcases made in weaving mills and other fabricated cotton textile products made in weaving mills, except cotton towels and washcloths (22119), are now included in 2211A. Product class 22110 is now exclusively products not specified by kind (n.s.k.).

<sup>33</sup>In 1982, old Product Class 22210, Other Fabricated Manmade Fiber and Silk Textile Products (Made in Weaving Mills) Including Fabrics, N.S.K., was reclassified as product classes 2221A and 22210.

<sup>34</sup>Value of shipments for 1982 includes Product Class 22315, Receipts for Commission Finishing or Sponging of Wool Fabrics and is not comparable to prior years. The 1982 ratios are withheld to avoid disclosing data for individual companies in product class 22311.

<sup>35</sup>Ratios for the 20 and 50 largest companies are not available. The total value of shipments and ratios for the 4 and 8 largest companies have been recomputed to exclude receipts for contract and commission work.

<sup>36</sup>In 1982, old Product Class 22511, Women's Finished Full-Fashioned Stockings, was reclassified as product class 22512 (pt.); old Product Class 22513, Women's Finished Seamless Hosiery, Full-Length and Knee-Length, was reclassified as product classes 22512 (pt.) and 22516; and old Product Classes 22514, Women's Full-Fashioned Hosiery Shipped in the Greige, and 22515, Women's Seamless Full-Length and Knee-Length Hosiery Shipped in the Greige, were reclassified as product class 22517.

<sup>37</sup>The 1963 ratios include receipts for contract and commission work and are comparable with the 1967 ratios.

<sup>38</sup>The 1963 ratios exclude receipts for contract and commission work and, therefore, are not comparable to the 1972 and 1967 ratios; however, they are comparable to the 1958 and 1954 ratios.

<sup>39</sup>1958 and earlier, value of production rather than value of shipments.

<sup>40</sup>In 1982, old Product Classes 22841, Finished Thread for Use in the Home; 22842, Finished Thread for Industrial or Manufactures' Use; Unfinished Thread Shipped for Finishing; and 22840, Thread, N.S.K., were reclassified as product class 22840.

<sup>41</sup>Includes some duplication since some nonwoven fabricated products are made from purchased nonwoven fabrics.

<sup>42</sup>In 1982, old Product Classes 23351, Women's, Misses', and Juniors' Dresses Sold at a Unit Price, and 23352, Women's, Misses', and Juniors' Dresses Sold at a Dozen Price, were reclassified as product class 23353.

<sup>43</sup>In 1982, old Product Class 23610, Children's and Infants' Dresses, Blouses, and Shirts, Except Knit Sport Shirts; and Children's Dresses and Blouses, N.S.K., was reclassified as product classes 23611 and 23610.

<sup>44</sup>In 1982, old Product Class 23630, Children's and Infants' Coats, Suits, Snowsuits, and Coat-and-Legging Sets; and Children's Coats and Suits, N.S.K., was reclassified as product classes 23631 and 23630.

<sup>45</sup>In 1982, old Product Class 23690, Children's and Infants' Outerwear, N.E.C., and N.S.K., was reclassified as product classes 23691 and 23690.

<sup>46</sup>In 1982, old Product Class 23920, Other Housefurnishings and Housefurnishings, N.E.C., N.S.K., was reclassified as product classes 23924 and 23920.

<sup>47</sup>Data for 1967 are not strictly comparable with 1963 because of product misclassification. Approximately 20 to 75 percent of the 1967 shipments data for product class 23962 were included in other product classes in 1963. Revised figures for 1963 are not available.

<sup>48</sup>Excludes commission receipts for Schiffli machine embroidering on materials owned by others. This amounted to \$13.8 million in 1967 and \$21.0 million in 1963. The 1967 total included \$24.9 million which was not differentiated between the value of product sales and receipts for commission work. The comparable figure for 1963 was \$5.5 million.

<sup>49</sup>1972 data for product classes 24211, 24212, and 24218 are not completely comparable to later years data because of revision in 1977 to product class structure for industry 2421. In 1977, railway crossties and mine ties were switched from 24211 to 24218, and wood siding from 24211 and 24212 to 24218.

<sup>50</sup>Comparable data are not available for years prior to 1972 due to a major revision in the SIC system. This product group now includes wood frames for household furniture which previously was identified as product class 25126.

<sup>51</sup>Includes shipments of wood chips, which in 1967 were reclassified to product class 24215.

<sup>52</sup>Comparable data are not available for prior years due to a significant revision to the 1972 SIC system. For 1972, 1967 Product Class 24317, Cabinet Work to be Built In, was reclassified to Industry 2434, Wood Kitchen Cabinets.

<sup>53</sup>In 1972, 1967 Product Class 24316, Finished Wood Mouldings, was reclassified as product classes 24316 and 24317.

<sup>54</sup>For 1972, industries 2435 and 2436 were formed by splitting old industry 2432, Veneer and Plywood. Comparable data are not available for 1967 and earlier years at the product group level.

<sup>55</sup>Comparable data are not available for years prior to 1982 due to reclassification of softwood plywood in 1979 from interior type and exterior type (1977 product classes 24361 and 24362) to product classes 24365, 24366, and 24367.

<sup>56</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. All products now classified in industry 2439 were formerly part of old industry 2433. The balance of old industry 2433 is now classified as industry 2452.

<sup>57</sup>In 1982, old Product Classes 24491, Wirebound Boxes Made from Lumber, Veneer, and Plywood; 24993, Veneer and Plywood Containers, Except Boxes and Crates; 24995, Slack and Tight Cooperage; and 24990, Wood Containers, N.E.C., N.S.K., were reclassified as product class 24990.

<sup>58</sup>Comparable data for prior years are not available due to a major revision in the 1972 SIC system. Industry 2451 was previously a part of Product Class 37910, Trailer Coaches, under industry 3791.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

<sup>59</sup> Comparable data for prior years are not available due to a major revision in the 1972 SIC system. All products now classified in this industry were formerly part of old Industry 2433, Prefabricated Wood Structures. The balance of old industry 2433 is now classified as 2439.
<sup>60</sup> In 1982, old Product Classes 24921, Particleboard, Platen Type (Mat-Formed); 24922, Particleboard, Extruded Type; and 24920, Particleboard, N.S.K., were reclassified as product class 24920.
<sup>61</sup> Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. This product group, as now constituted, excludes pallets and skids (1967 product class 24992) and particleboard (1967 product class 24993) which were reclassified to product classes 24480 and 24920, respectively.
<sup>62</sup> In 1982, old Product Class 24997, Medium Density Fiberboard (MDF), was split between 1982 product classes 24993 and 24995. The manufacture of prefinished MDF (from purchased MDF) was reclassified to 24995 and the balance of old product class 24997 was reclassified as 24993. Therefore, 1982 data are not completely comparable to 1977.
<sup>63</sup> In 1982, product class 24995 was formed from parts of old Product Classes 24997, Medium Density Fiberboard, and 24999, Miscellaneous Wood Products, N.E.C.
<sup>64</sup> Data for product class 24996 are not completely comparable to later years because of revisions in 1977 to product class structure.
<sup>65</sup> In 1982, old Product Class 24999, Miscellaneous Wood Products, N.E.C., was split between 1982 product classes 24995 and 2499A. The manufacture of prefinished particleboard (from purchased) was reclassified to 24995 and the balance of old product class 24999 was reclassified as 2499A. For 2499A, 1982 data are not completely comparable to 1977.
<sup>66</sup> Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. This product group, as now constituted, excludes product class 25111 and part of product class 25112 which were reclassified as 25170; and product class 25114 which was reclassified as product class 24341.
<sup>67</sup> Comparability of this product class changed in 1972 due to the reclassification of sewing machine cabinets to product class 25170. The change is estimated to be approximately 11 percent of the total value of shipments in 1972.
<sup>68</sup> Comparability of this product group changed in 1972 due to the reclassification of wood frames for household furniture (1967 product class 25126) to industry 2426. The change is estimated to be less than 10 percent of the total value of shipments in 1972.
<sup>69</sup> In 1982, old Product Classes 25154, Convertible Sofas, and 25157, Other Dual Purpose Sleep Furniture, were reclassified as product class 25155.
<sup>70</sup> In 1982, old Product Class 25150, Mattress and Bedspreads, N.S.K., was reclassified as product classes 25156, 25158, and 25150.
<sup>71</sup> Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. This product class was previously classified under industry 2511 as product class 25111 and part of product class 25112.
<sup>72</sup> In 1982, old Product Class 25222, Metal Office Desks, and part of 25224, Other Metal Office Furniture, Including Tables, Stands, Etc., were reclassified as product class 25225. Old Product Class 25223, Metal Office Filing Cabinets and Cases, and part of 25224 were reclassified as 25226. Part of old product class 25224 was reclassified as 25227. Old Product Class 25220, Metal Office Furniture, N.S.K., and part of 25224 were reclassified as 25220.
<sup>73</sup> In 1982, old Product Class 26112, Other Pulp, Including Pulpmill Byproducts, Except Tall Oil, was reclassified as product classes 26113, 26114, and 26115.
<sup>74</sup> For 1977, Product Class 2621A, Tissue Paper and Other Machine-Creped Paper, included data from industry 26210, Papermill Products, Except Building Paper, N.S.K.
<sup>75</sup> In 1982, old Product Classes 26412, Oiled, Waxed, and Wax-Laminated Paper, Plain or Printed; 26417, Laminated or Coated Rolls and Sheets, for Packaging Uses, Except Waxed; 26418, Other Coated and Processed Paper, Except For Packaging Uses and Except Waxed; and 26410, Paper Coating and Glazing, N.S.K., were restructured to form product classes 26415, 26416, 26419, 2641A, 2641B, and 26410.
<sup>76</sup> In 1982, old Product Classes 26431, Grocers' and Variety Bags (Paper) and Wardrobe, Shopping, and Other Bags, and 26432, Specialty Bags and Liners, were reclassified as product classes 26434, 26435, 26436, and 26437.
<sup>77</sup> In 1982, old Product Class 26451, Office Supplies (Filing Accessories) and Miscellaneous Products, was reclassified as product classes 26453 and 26454.
<sup>78</sup> In 1982, old Product Classes 26461, Bituminous Fiber Pipe, Sewer and Drainage, Conduit and Fittings—Molded Pulp or Papier-Mache; 26462, Other Pressed and Molded Pulp Goods; and 26460, Pressed and Molded Pulp Goods, N.S.K., were reclassified as product class 26460.
<sup>79</sup> In 1982, old Product Class 26472, Sanitary Tissue Health Products, was reclassified as product classes 26473 and 26474.
<sup>80</sup> In 1972, product class 26491 was reclassified as industry 2648 and split into product classes 26481 and 26482.
<sup>81</sup> Comparable data are not available prior to 1972 due to a major revision in the SIC system. This group now includes wallpaper (1967 product class 26440) and excludes stationary products (1967 product class 26491) which were reclassified as industry 2648.
<sup>82</sup> In 1982, old Product Classes 26492, Wrapping Products (Gift Wrap, Etc.), and 26495, Other Converted Paper and Board Products, were reclassified as product classes 26494, 26496, and 26497.
<sup>83</sup> In 1982, old Product Class 26543, Other Sanitary Food Containers, Boards, and Trays, was reclassified as product classes 26544 and 26545.
<sup>84</sup> In 1982, old Product Class 27215, General and Consumer Periodicals, Receipts from Subscriptions and Sales, was reclassified as product classes 2721A and 2721B.
<sup>85</sup> Data for 1977 and prior years are not completely comparable due to reclassification in 1982 of religious subscription reference books from 2731E to 2731A.
<sup>86</sup> In 1982, old Product Class 27315, General Books (Trade, Etc.), was reclassified as product classes 2731A, 2731B, 2731C, and 2731D.
<sup>87</sup> For 1967 and prior years, this product class was 27312, Subscription Reference Books, Hardbound. In 1972, the product class was recoded 27317 and expanded to include other reference books, such as dictionaries, thesauruses, and atlases.
<sup>88</sup> In 1982, old Product Classes 27321, Books, Printing Only, Lithographic; 27322, Books, Printing and Binding, Lithographic; 27328, Books, Printing Only or Printing and Binding, Other than Lithographic; and 27329, Pamphlets, Workbooks, and Tests, Printing Only or Printing and Binding, were restructured as product classes 27323, 27324, 27325, 27326, 2732A, 2732B, and 2732C.
<sup>89</sup> In 1982, old Product Class 27413, Other Miscellaneous Publishing, was reclassified as product classes 27414 and 27415.
<sup>90</sup> Comparability of this product group has changed slightly as a result of the 1972 SIC revision. In 1972, product classes 27517 and 27518 were reclassified as industry 2754. The change is estimated to be approximately 13 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.
<sup>91</sup> Comparability of product group 2752 prior to 1972 was affected by reclassification of Product Class 27527, Lithographic Plates Made for Others, to industry 2795 in 1972. The change is estimated to be approximately 5 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.
<sup>92</sup> In 1982, old Product Class 27530, Engraving and Plate Printing, Excluding Photoengraving, was reclassified as product classes 27531, 27532, and 27530.
<sup>93</sup> In 1972, industry 2754 was formed by combining old product classes 27517 and 27518. Comparable data are not available for 1967 and earlier years.
<sup>94</sup> In 1982, old Product Class 27544, Financial and Legal Printing, Gravure, was combined into product class 27546. For 1977, the data have also been combined to be comparable.
<sup>95</sup> In 1982, old Product Class 27821, Blankbook Making, was reclassified as product classes 27823 and 27824.
<sup>96</sup> Data for product class 27940 have been combined with 27930.
<sup>97</sup> In 1972, product class 27527 was reclassified as product classes 27951 and 27952.
<sup>98</sup> In 1982, old Product Classes 28122, Sodium Carbonate (Soda Ash), and 28124, Other Alkalies, were reclassified as product class 28125.
<sup>99</sup> Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of household bleaches to industry 2842; the manufacture of synthetic ammonia, nitric acid, and ammonium compounds to industry 2873; and the manufacture of phosphoric acid to industry 2874.
<sup>100</sup> Aluminum oxide and other aluminum compounds data are combined for 1967 and earlier years.
<sup>101</sup> Comparability of this product class has changed slightly as a result of the 1972 SIC revision. Calcium hypochlorite (high-test) and other industrial bleaches were transferred from old Product Class 28192, Inorganic Industrial and Household Bleaching Compounds, to product class 28199. The change is estimated to be less than 15 percent of the total value of shipments. 1967 and earlier years are tabulated under the old definition.
<sup>102</sup> Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of unsupported plastics film, sheets, rods, and tubes; regenerated cellulosic products, except rayon; and custom compounded purchased resins to industry 3079. In addition, the production of synthetic resin adhesives from resins manufactured in the same establishment was transferred to industry 2891.
<sup>103</sup> Comparability of this product class has changed slightly as a result of the 1972 SIC revision. Data for synthetic resins for protective coatings (1967 product class 28216) are now included in product classes 28213 and 28214. The change is estimated to be less than 15 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.
<sup>104</sup> Data are not directly comparable with later years as a result of a 1977 SIC revision. 1972 product class 2824 was split to form product classes 28225 and 28246.
<sup>105</sup> In 1982, old Product Classes 28313, Antitoxins, Antivenins, and Similar Derivatives, for Human Use; 28314, Diagnostic Substances and Other Biologics, for Human Use; and 28315, Biological Preparations for Veterinary Use, were restructured to form product classes 28317, 28318, and 2831A.
<sup>106</sup> Data prior to 1963 include both natural and synthetic glycerine.
<sup>107</sup> Comparable data are not available for 1967 and earlier years at the product group level due to a major revision in the 1972 SIC system. In 1972, household insecticides and repellents, formerly product class 28421, were transferred to Industry 2879, Agricultural Chemicals, N.E.C., and household bleaches, formerly included in Industry 2819, Industrial Inorganic Chemicals, N.E.C., were reclassified to product class 28422.
<sup>108</sup> In 1982, old Product Classes 28518, Putty and Allied Products, and 28519, Miscellaneous Paint Products, were reclassified as product class 28515.
<sup>109</sup> Represents values reported by tar distillers and excludes shipments for tar, tar curdes, and pitches by establishments classified in Industry 2911, Petroleum Refining, and Industry 3312, Blast Furnaces and Steel Mills (Byproduct Coke Ovens).
<sup>110</sup> Excludes rubbing alcohol (primary to Industry 2834, Pharmaceutical Preparations) and antifreeze (primary to Industry 2899, Chemical Preparations, N.E.C.).
<sup>111</sup> Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Industry 2873, Nitrogenous Fertilizers, was formed by combining synthetic ammonia, nitric acid, and ammonium compounds (formerly classified as product class 28191); urea (formerly in product class 28182); and fertilizer materials of organic origin (formerly in product class 28712).
<sup>112</sup> The 1972 definition of this industry has been revised from that used in the 1967 SIC manual and a new SIC number and title were assigned. Industry 2874 was formed by combining phosphoric acid formerly classified in product class 28194, with superphosphate, other phosphatic fertilizer materials, and mixed fertilizers produced from one or more materials made in the same plant, which were formerly classified as industry 2871.
<sup>113</sup> Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. Phosphoric acid was formerly classified in product class 28194.
<sup>114</sup> Comparability of this product class has changed as a result of the 1972 SIC revision. 1967 and earlier data are tabulated under the old definition. The production of fertilizer materials of organic origin was formerly classified with this product class under the product class 28712.
<sup>115</sup> Comparability of this product group has changed significantly as a result of the 1972 SIC revision. Industry 2879 as now constituted includes the manufacture of household insecticides and repellents which were previously classified as product class 28421 in industry 2842. The change is estimated to be 15 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.
<sup>116</sup> Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. This product group as now constituted includes synthetic resin adhesives from resins manufactured in the same establishment (formerly in industry 2821), caulking compounds and sealants (formerly in industry 2851), rubber cement (formerly in industry 3069), and sealants, n.e.c., (formerly in industry 2899), and excludes gelatin and sizes (now in industry 2899).
<sup>117</sup> Comparable data are not available for prior years due to the reclassification of this product class for 1972. Product class 28913 was formerly included in 1967 product class 28911.
<sup>118</sup> Comparable data are not available for prior years due to a significant revision in the 1972 SIC system. This product class includes synthetic resin adhesives (formerly product class 28215), rubber cement (formerly in product class 30696), and synthetic base adhesives (formerly in product class 28911).
<sup>119</sup> Comparable data are not available for prior years due to a significant revision in the 1972 SIC system. This product class was formerly part of product class 28518.
<sup>120</sup> Comparability of this product group has changed slightly as a result of the 1972 SIC revisions. Industry 2899 as now constituted includes gelatin, except ready-to-eat dessert, (formerly classified in industry 2891), sizes (formerly in industry 2891), and embalming chemicals (formerly in industry 3994), and excludes sealants, n.e.c. (now classified in industry 2891).
<sup>121</sup> In 1982, old Product Class 29116, Liquefied Refinery Gases, Including Other Aliphatics (Feed Stock and Other Uses), was reclassified as product classes 2911A and 2911B.
<sup>122</sup> In 1982, old Product Class 29110, Other Finished Petroleum Products, Including Waxes, was reclassified as product classes 2911C, 2911D, and 29110.
<sup>123</sup> In 1982, old Product Class 30113, Other Pneumatic Tires and All Solid Tires, was reclassified as product classes 30117, 30118, 30119, and 3011A.
<sup>124</sup> In 1982, old Product Class 30114, Inner Tubes, All, was reclassified as product classes 3011B and 3011C.
<sup>125</sup> Data are not directly comparable to earlier data due to a significant revision in the 1972 SIC system. Plastics footwear, which was classified in product group 3079- in 1967, is now included in product group 3021-. The amount of plastics footwear in 1967, and hence the degree of change for product group 3021-, is unknown.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

<sup>126</sup>In 1982, old Product Class 30210, Rubber and Plastics Footwear, was reclassified as product classes 30214, 30215, and 30210.

<sup>127</sup>The rubber and plastics hose and belting product grouping was included for the first time in the census of manufactures in 1972. This product group includes all of 1967 Product Class 30691, Rubber and Plastics Belts and Belting; all of 1967 Product Class 30692, Rubber Hose and Tubing, except code 30692 81, Tubing, Except Medical and Surgical and Reinforced; part of 1967 Product Class 30795, Industrial Plastics Products; and part of 1967 Product Class 30798, Consumer and Commercial Plastics Products, N.E.C.

<sup>128</sup>This product grouping was significantly revised in 1972, although the code number was unchanged. All of 1967 Product Class 30691, Rubber and Plastics Belts and Belting, and all of 1967 Product Class 30692, Rubber Hose and Tubing, except for code 30692 81, Tubing, Except Medical and Surgical and Reinforced, are now classified in Product Group 3041-. Rubber and Plastics Hose and Belting. Tubing, except medical and surgical and reinforced, is now included in product class 30695. In addition, seals and packing (formerly product codes 30695 26, 27, and 28) are now included in product group 3293-; and latex and solvent-type cement (formerly product codes 30698 64 and 65) are now classified in product group 3291-.

<sup>129</sup>Data are not directly comparable to earlier data due to a significant revision in the 1972 SIC system. See the Explanatory Text section of MC72(2)-30A, Rubber and Miscellaneous Plastics Products, for a list of the changes.

<sup>130</sup>In 1982, there was a major restructuring of the product classes for Industry 3079, Miscellaneous Plastics Products. Old product classes 30791, 30793, 30796, 30798, 30799, 3079A, 3079B, 3079C, 3079D, 3079E, 3079F, 3079G, and 3079H were reclassified to form product classes 30792, 30794, 30795, 30797, 3079J, and 3079K.

<sup>131</sup>In 1982, old Product Classes 31111, Finished Cattle Hide and Kip Hide Leathers; 31112, Finished Calf and Whole Kip Leathers; 31113, Finished Sheep and Lamb Leathers; 31114, Other Finished Leathers, N.E.C.; and 31115, Rough, Russet, and Crust Leather, were reclassified as product class 31116.

<sup>132</sup>Includes laminated glass made in industry 3211, Flat Glass; and laminated glass made in industry 3231, Products of Purchased Glass, combined to avoid disclosing data for individual companies. In 1972, no production of shipments of "laminated plate more than one-fourth inch" (code 32113 31), "laminated sheet (window) glass" (code 32113 51), or "other laminated glass" (code 32113 71) were reported in industry 3211, Flat Glass. The same was true in 1967, except that a small amount of "laminated plate more than one-fourth inch" (code 32113 31) was produced in industry 3211, Flat Glass.

<sup>133</sup>Excludes value of laminated glass (product class 32313) which is included with industry 3211.

<sup>134</sup>In 1982, old Product Classes 32511, Brick, Except Ceramic Glazed and Refractory, and 32512, Glazed Brick and Structural Hollow Tile, were reclassified as product class 32510.

<sup>135</sup>In 1982, old Product Classes 32911, Nonmetallic Artificial (Synthetic) Sized Grains and Flour Abrasives (Including Graded Products Only), and 32912, Nonmetallic Bonded Abrasive Products, Including Diamond Abrasives, were reclassified as product classes 32915 and 32916.

<sup>136</sup>Insulation materials containing asbestos, which were previously classified in product class 32933, are now included in product class 32929. This shift into product class 32929 represents approximately 13 percent of the total 1967 shipments at the U.S. level.

<sup>137</sup>Not completely comparable. In 1954, an undetermined amount of vinyl asbestos tile was included in Industry 3971, Plastics Products, N.E.C.

<sup>138</sup>In 1982, old Product Classes 32932, Gaskets and Gasketing Materials, and 32933, Packing and Sealing Devices, were reclassified as product classes 32934, 32935, 32936, 32937, 32938, and 32939.

<sup>139</sup>Product class 33121 includes ferroalloys made by establishments classified in industry 3312. This value is a disclosure (D) for 1982 and 1977; \$42.1 million for 1972; \$79.0 million for 1967; \$18.0 million for 1963; and not available (NA) for 1958. The totals for product group 3313 exclude ferroalloys made in industry 3312.

<sup>140</sup>Excludes the value of those products produced and consumed within the same plant in the manufacture of other products. Therefore, the data are limited to the value of those products that were produced for sale in commercial markets or for transfer to other plants at the same company for use in manufacturing other products.

<sup>141</sup>In 1982, old Product Class 33397, Other Primary Nonferrous Metals, was reclassified as product classes 33398 and 33399.

<sup>142</sup>In 1972, old product group 3352- was split to form new product groups 3353-, 3354-, and 3355-.

<sup>143</sup>In 1972, product class 33560 was reclassified as product classes 33561, 33562, 33563, and 33569.

<sup>144</sup>Product class 33569 includes bare nonferrous metal wire made in industry 3356, product code 33569 92. This amounts to \$166.5 million for 1982; \$194.0 million for 1977; \$61.4 million for 1972. The total of product class 33573 excludes bare nonferrous metal wire made in industry 3356.

<sup>145</sup>In 1982, old Product Class 33570, Nonferrous Wire Drawing and Insulating, N.S.K., was reclassified as product classes 33579 and 33570.

<sup>146</sup>For 1972, old product group 3399- was split to form new product groups 3398- and 3399-.

<sup>147</sup>Value chiefly represents receipts for work done on material owned by others. The value represents only the work done by establishments classified in the industry for which the product or service is primary.

<sup>148</sup>Not completely comparable: 1954 figures include "metal fluid milk shipping and delivery containers" valued at \$8,638,000. In 1958, these containers were included in product class 34943.

<sup>149</sup>In 1982, old Product Classes 34113, Steel Cans, Tin Plate; 34114, Aluminum Cans; and 34115, Metal Can Lids, Ends, Parts, Shipped Separately, were reclassified as product classes 34111 and 34112.

<sup>150</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Warm air furnaces (product class 34332 in 1967) and parts and attachments for warm air furnaces (code 34336 73 in 1967) have shifted to Industry 3585, Refrigeration and Heating Equipment, in 1972. This change represents greater than 15 percent of the total 1967 shipments at the U.S. level.

<sup>151</sup>In 1982, old Product Class 34337, Other Heating Equipment, Except Electric, was reclassified as product classes 34338 and 34339.

<sup>152</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product group 3449- was split into product groups 3448- and 3449-.

<sup>153</sup>In 1982, old Product Class 34495, Other Miscellaneous Metal Building Materials and Curtain Wall, was reclassified as product classes 34496 and 34497.

<sup>154</sup>In 1982, old Product Class 34490, Miscellaneous Metal Work, N.S.K., was reclassified as product classes 34498 and 34490.

<sup>155</sup>In 1982, old Product Classes 34636, Cold Impression Die Impact Nonferrous Forgings; 34637, Seamless Rolled Ring Nonferrous Forgings; and 34638, Open-Die or Smith Nonferrous Forgings, were reclassified as product class 34639.

<sup>156</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product group 3461- was split into product groups 3465-, 3466-, and 3469-.

<sup>157</sup>Revisions were made for 1963 to include automobile stampings produced by automobile producing companies. Concentration ratios cannot be published for 1963 on a revised basis without approximating the operations of individual companies.

<sup>158</sup>In 1982, old Product Class 34832, Receipts for Ammunition Loading and Assembly More Than 30 mm., was reclassified as part of product class 34831. Concentration ratios are not available for years prior to 1982.

<sup>159</sup>Product class 34841 is combined with product class 34842 in order to avoid disclosing data for individual companies.

<sup>160</sup>In 1982, old Product Class 34943, Other Metal Valves for Piping Systems and Equipment (Except Plumbing and Heating Valves), was reclassified as product classes 34949 and 3494A.

<sup>161</sup>In 1982, old Product Class 34942, Valves for Power Transfer (Pneumatic and Hydraulic), was reclassified as product classes 3494B, 3494C, 3494D, and 3494H.

<sup>162</sup>In 1982, old Product Class 34946, Fittings and Assemblies for Tubing and Hose (Except Plumbers' Brass Goods), was reclassified as product classes 3494E, 3494F, and 3494G.

<sup>163</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product group 3481- was split into product groups 3495- and 3496-.

<sup>164</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product groups 3492-, 3496-, and 3499- were combined to form product group 3499-.

<sup>165</sup>In 1982, old Product Class 34994, All Other Fabricated Metal Products, Except Flat Metal Strapping, N.E.C., was reclassified as product classes 34995, 34996, and 34998.

<sup>166</sup>In 1982, old Product Classes 35191, Gasoline Engines, Less Than 11 Horsepower, Except Outboard, Aircraft, Automobile, Truck, Bus, and Tank, and 35192, Gasoline Engines, 11 Horsepower and Over, Except Outboard, Aircraft, Automobile, Truck, Bus, and Tank, were reclassified as product class 35191.

<sup>167</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. In 1972, product group 3799- and part of product group 3522- were combined to form product group 3523-. The remaining part of 3522- was reclassified as 3524-.

<sup>168</sup>In 1982, parts for portable drilling rigs were reclassified from product class 35333 to 1982 product class 35335. In addition, old Product Class 35334, Other Oil and Gas Field Machinery and Tools, Except Pumps, Including Water Well, was reclassified as product classes 35335 and 35336.

<sup>169</sup>In 1982, old Product Class 35340, Elevators and Moving Stairways, was reclassified as product classes 35341, 35342, and 35340.

<sup>170</sup>In 1972, automatic stackers and parts and attachments are reclassified from product class 35370 to 35362. These products shifting into product class 35362 represent approximately 10 percent of the total 1972 shipments at the U.S. level. For 1967, data for these products were included in industry 3537, but were not available separately.

<sup>171</sup>In 1982, old Product Class 35417, Other Metal Cutting Machine Tools (Except Those Designed Primarily for Home Workshops, Laboratories, Etc.), was reclassified as product classes 3541A, 3541B, and 3541C.

<sup>172</sup>In 1972, old industry 3548 was split to form new industries 3546, 3547, and 3549.

<sup>173</sup>In 1977, chain saws and parts were classified in industry 3546. Prior to 1977, chain saws and parts were classified in industry 3553.

<sup>174</sup>In 1982, old Product Class 35493, Welding and Cutting Apparatus, Except Electric, was reclassified as product classes 35496 and 35497.

<sup>175</sup>In 1972, dairy packaging and bottling machinery has shifted from product class 35511 to product class 35514. These products shifting out of product class 35111 represent approximately 34 percent of the total 1972 shipments at the U.S. level.

<sup>176</sup>In 1972, wrapping machines have moved from product class 35512 to Product Class 35514, Wrapping Machines, and represent approximately 5 percent of the total 1972 shipments at the U.S. level.

<sup>177</sup>In 1972, product class 35513 was reclassified as product classes 35513 and 35514.

<sup>178</sup>In 1982, old Product Class 35540, Paper Industries Machinery and Parts and Attachments, was reclassified as product classes 35541, 35542, and 35540.

<sup>179</sup>In 1982, old Product Class 35554, Bindery Equipment, was reclassified as part of product class 35556. Also, old Product Class 35555, Printing Trades Machinery, N.E.C., was split into the remainder of 35556 and all of product class 35557.

<sup>180</sup>For 1972, industry 3561 was reclassified as industries 3561 and 3563.

<sup>181</sup>For 1972, industrial spraying equipment was reclassified as product class 35635; this product was formerly part of product class 35615. Industrial spraying equipment shifting out of product class 35615 represents more than 15 percent of the total shipments at the U.S. level.

<sup>182</sup>In 1982, old Product Class 35612, Hydraulic Fluid Power Pumps and Motors, was reclassified as product classes 35617 and 35618.

<sup>183</sup>In 1982, old 1972 Product Class 35616, Parts and Attachments for Pumps and Pumping Equipment, was reclassified as product classes 3561A, 3561B, and 3561C. Previously in 1977, old 1967 Product Class 35616, Parts for Pumps and Compressors, had been reclassified as 1972 product classes 35616 and 35632.

<sup>184</sup>Data for Product Class 35630, Air and Gas Compressors, N.S.K., were included in Product Class 35610, Pumps and Pumping Equipment, in 1972 and prior years.

<sup>185</sup>In 1972, industry 3566 was reclassified as industries 3566 and 3568.

<sup>186</sup>For 1972, the "not specified by kind" for product class 35680 is included with product class 35660.

<sup>187</sup>In 1982, old Product Class 35692, Filters and Strainers, was reclassified as product classes 35693, 35694, 35695, and 35696.

<sup>188</sup>For 1977, data for 1977 product class 35741, Adding and Calculating Machines, Except Electronic, were combined with product class 35743 to avoid disclosing data for individual companies.

<sup>189</sup>For 1972, data for 1977 Product Class 35741, Adding and Calculating Machines, Except Electronic, and product class 35743 were combined with product class 35745 to avoid disclosing data for individual companies.

<sup>190</sup>In 1982, old Product Classes 35741, Adding and Calculating Machines, Except Electronic, and 35742, Electronic Calculating Machines, were reclassified as product class 35744.

<sup>191</sup>In 1982, part of old Product Class 35797, Typewriters, Including Coded Media, Parts, and Attachments, were reclassified as product class 35792.

<sup>192</sup>In 1982, old Product Classes 35794, Dictating, Transcribing, and Recording Machines; 35796, Office Machines, N.E.C.; and part of 35797, Typewriters, Including Coded Media, Parts, and Attachments, were reclassified as product class 35799.



**Table 6. Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1982 and Earlier Census Years—Con.**

<sup>193</sup>In 1982, old Product Classes 35798, Parts and Attachments for Addressing, Dictating, Duplicating, and Other Office and Store Machines, N.E.C., and part of 35797, Typewriters, Including Coded Media, Parts and Attachments, were reclassified as product class 3579A.

<sup>194</sup>In 1972, coin-operated washers and dryers, less than 10-pound load, and parts and attachments for these products were moved from product class 35820 to product class 36333. Products shifting out of product class 35820 represent more than 15 percent of the total value of shipments.

<sup>195</sup>In 1972, warm air furnaces were changed from product class 34332 to 1972 product class 35858. Parts for warm air furnaces moved from product class 34336 to 35858 for 1972. Parts for warm air furnaces shifting into product class 35858 represent approximately 4 percent of the total 1967 shipments at the U.S. level.

<sup>196</sup>In 1982, old Product Classes 35857, Other Refrigeration and Air-Conditioning Equipment, Including Soda Fountain and Beer Dispensing Equipment, and 35858, Warm Air Furnaces (Except Floor and Wall) and Parts and Attachments, were reclassified as product classes 35859, 3585A, and 3585B.

<sup>197</sup>In 1982, old Product Class 35992, Pneumatic and Hydraulic Cylinders, was reclassified as product classes 35996, 35997, 35998, and 35999.

<sup>198</sup>In 1982, old Product Class 36137, Relays, Control Circuits; and part of Product Class 36131, Switchgear, Except Ducts and Control Relays, were reclassified as product class 36138.

<sup>199</sup>In 1982, part of old Product Class 36131, Switchgear, Except Ducts and Control Relays, was reclassified as product class 36139.

<sup>200</sup>In 1982, old Product Class 36220, General Industry Power Circuit Devices and Controls and Parts, was reclassified as product classes 36221, 36222, 36223, and 36220.

<sup>201</sup>Product Class 36323, Parts for Household Refrigerators and Freezers, was new in 1977. Parts were previously included in product classes 36321 and 36322.

<sup>202</sup>Product Class 36333, Other Household Laundry Equipment and Parts, was expanded in 1972 from 1967 product class 36332 to include coin-operated washer-extractor combinations and coin-operated drying tumblers, both 10-pound maximum load or less. Both of these products were part of 1967 product class 35820. The value of these added products was \$28.0 million in the 1972 Census of Manufactures.

<sup>203</sup>Data for product class 36361 are combined with 36362 to avoid disclosing data for individual companies.

<sup>204</sup>In 1982, old Product Class 36430, Current-Carrying Wiring Devices, Including Lightning Rods, was reclassified as product classes 36431, 36432, 36433, 36434, 36435, 36436, and 36430.

<sup>205</sup>In 1972, Product Class 36457, Portable Residential Type Lighting Fixtures and Parts and Accessories for Residential Lighting Fixtures, including 1967 Product Class 36427, Residential Type Electric Fixtures (Portable), includes part of 1967 Product Class 36426, Other Electric and Nonelectric Lighting Equipment (Including Hand Portable Equipment), and Parts and Accessories. The part of 1967 product class 36426 in 1972 product class 36457 had a value of \$15.1 million in 1972.

<sup>206</sup>Value of product class, not specified by kind, for industries 3646, 3647, and 3648 are included in industry 3645 prior to 1972. All products not specified by kind for administrative records and most for other records are included in industry 3645, in 1972.

<sup>207</sup>In 1972, parts and accessories for residential, commercial, industrial, institutional, and vehicular lighting fixtures was split out of 1972 Product Class 36489, Other Electric and Nonelectric Lighting Equipment and Parts. These products were part of this product class before 1972. The value of these products in the 1972 Census of Manufactures was \$39.1 million.

<sup>208</sup>In 1982, old Product Class 36520, Phonograph Records, Record Blanks, and Pre-recorded Tapes, was reclassified as product classes 36521, 36522, and 36520.

<sup>209</sup>In 1982, old Product Class 36623, Intercommunication Equipment, Alarm Systems, and Traffic Control Equipment, was reclassified as product classes 36624, 36626, and 36628.

<sup>210</sup>Data prior to 1977 are not available due to incomparability.

<sup>211</sup>In 1982, old Product Class 36780, Connectors for Electronic Applications, was reclassified as product classes 36781, 36782, 36783, 36784, 36785, and 36780.

<sup>212</sup>In 1982, old Product Class 36790, Electronic Components and Subassemblies, N.E.C., was reclassified as product classes 36791, 36792, 36793, 36794, 36795, 36796, 36797, 36798, 36799, and 36790.

<sup>213</sup>Automated blood and body fluid analyzers, included in old Product Class 36932, Electromedical Equipment, Including Diagnostic, Therapeutic, and Patient Monitoring, but Excluding Ionizing Radiation Equipment, were reclassified into product class 38326 after the 1977 data were originally published. In 1982, old product class 36932 was reclassified as 36933. Comparable data for 1977 and prior years are not available.

<sup>214</sup>In 1982, switches specifically designed for use in vehicles and aircraft (all types: starting, lighting, ignition, etc.) were reclassified from old Product Class 36945, Other Complete Electrical Equipment for Internal Combustion Engines, to 36433. Old product class 36945 was reclassified as 36947. Comparable data for 1977 and prior years are not available.

<sup>215</sup>For 1977, product classes 37113, 37114, 37115, and 37110 were combined to avoid disclosing data for individual companies.

<sup>216</sup>For 1972 and 1967, product classes 37114 and 37115 were combined to avoid disclosing data for individual companies.

<sup>217</sup>Product Class 37160, Motor Homes Produced on Purchased Chassis, was established in 1977 from Product Class 37132, Complete Vehicles Produced on Purchased Chassis. Data for product class 37132 are not comparable with prior years.

<sup>218</sup>In 1982, old Product Class 37141, Parts and Accessories for Motor Vehicles, Excluding Kits and Rebuilt Parts, was reclassified as product classes 37142, 37144, 37145, 37146, 37147, 37148, and 37149.

<sup>219</sup>In 1982, old Product Classes 37212, Complete Aircraft, Personal and Utility Type; and 37213, Complete Aircraft, Commercial Transport Type, were reclassified as product class 37215.

<sup>220</sup>In 1972, industry 3722 was split into two separate industries: 3724 and 3764.

<sup>221</sup>In 1972, industry 3729 was split into two separate industries: 3728 and 3769.

<sup>222</sup>In 1982, old Product Classes 37281, Aircraft Parts and Accessories, N.E.C., and 37285, Aircraft Propellers, were reclassified as product classes 37281 and 37282.

<sup>223</sup>In 1982, old Product Classes 37325, Inboard Motorboats, Including Inboard-Outdrive Houseboats, and 37326, Inboard-Outdrive Boats, Except Houseboats, were reclassified as product classes 37323 and 37324.

<sup>224</sup>For 1972, industry 3751 is not fully comparable with prior years. Self-propelled golf carts were moved from product class 37510 in 1967 to product class 37993 in 1972. The value of shipments for self-propelled golf carts was \$36.3 million in 1967 and \$54.1 million in 1972.

<sup>225</sup>Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Industry 3792 represents approximately 27 percent of the products of old industry 3791, plus 16 percent of old industry 3799.

<sup>226</sup>In 1982, old Product Class 37999, Other Transportation Equipment, was reclassified as product classes 37996 and 37998.

<sup>227</sup>The 1967 Product Class 38213, Industrial Process Instruments, was split into three product classes in the 1972 Census of Manufactures: Product Class 38230, Process Control Instruments; Product Class 38292, Physical Properties Testing and Inspection Equipment; and Product Class 38293, Commercial Meteorological and General Purpose Instruments.

<sup>228</sup>The 1967 Product Class 38216, Other Mechanical Measuring and Controlling Instruments, was split into two product classes in the 1972 Census of Manufactures: Product Class 38243, Counting Devices; and Product Class 38294, Nuclear Radiation, Detection, and Monitoring Instruments.

<sup>229</sup>A small part of 1967 Industry 3611, Instruments to Measure Electricity, was not moved to industry 3825 in 1972. Instrument transformers, part of 1967 Product Class 36113, Other Electrical Measuring Instruments, became part of 1972 Product Class 36125, Specialty Transformers, Except Fluorescent Lamp Ballast. The other part of 1967 product class 36113 became all of 38253, Other Electrical Measuring Instruments, in 1972.

<sup>230</sup>In 1972, industry 3832, Optical Instruments and Lenses, is a combination of two 1967 industries: Industry 1941, Sighting and Fire-Control Equipment Made From Purchased Lenses; and Industry 3831, Optical Instruments and Lenses, Except Sighting and Fire-Control Equipment. Historical data for industry 1941 are not available.

<sup>231</sup>In 1982, old Product Class 38430, Dental Equipment and Supplies, was reclassified as product classes 38431 and 38432.

<sup>232</sup>Industry 3873, Watches, Clocks, and Watchcases, was published as two separate industries in 1967: Industry 3871, Watches and Clocks; and Industry 3872, Watchcases.

<sup>233</sup>In 1982, old Product Classes 38731, Clocks; and 38735, Watches With Domestic Movements and Parts for All Clocks and Watches, were reclassified as product classes 38732 and 38736.

<sup>234</sup>In 1982, old Product Class 39441, Games, Except Toys and Hobbies, was reclassified as product classes 39446 and 39447.

<sup>235</sup>Broad-tipped markers, formerly in industry 3953 (code 39530 43), are now included in industry 3951 (code 39510 43). This product code shift out of industry 3953 represents approximately 11 percent of the total 1967 shipments of products in industry 3953. The product code shift into industry 3951 is approximately 8 percent of the total 1967 shipments of products in industry 3951.

<sup>236</sup>In 1982, old Product Class 39510, Pens, Mechanical Pencils, and Pen Points, was reclassified as product classes 39511, 39512, 39513, and 39510.

<sup>237</sup>Data prior to 1972 are not directly comparable to earlier data due to a revision in the SIC system. In 1972, data for embalming chemicals are included in product group 2899-; burial garments in product group 2389-; and innerliners, sold as such, in product group 2399-. The exact amount of these products included in product group 3994- for 1967 is unknown, but it is estimated to represent less than 7 percent of the total value of shipments at the U.S. level.

<sup>238</sup>Data prior to 1972 are not directly comparable to earlier years due to a significant revision in the SIC system. Children-sized caskets and coffins are now included in product class 39953; whereas, in 1967, they were included in product classes 39941 and 39942. However, the effect of this change is unknown.

<sup>239</sup>Comparable data for 1967 and earlier years are not available, since the effects of the changes noted in footnotes 237 and 238 are estimated to be greater than 15 percent.

<sup>240</sup>The definition of industry 3999 has been revised for 1967. 1963 concentration ratios are not available on a basis comparable to 1967.

<sup>241</sup>Includes receipts for work done on materials owned by others.

**Table 7. Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1982 prod- uct code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>		
		Total (million dollars)	Percent accounted for by <sup>3</sup> —	
			4 largest companies	8 largest companies
20116 20136	Pork, processed, cured, or frozen (not canned or made into sausage) ----- 1982 --	5 320.6	22	35
	1977 --	3 778.6	18	30
	1972 --	2 413.5	22	32
	1967 --	2 008.0	22	37
	1963 --	1 634.7	25	41
	1958 --	1 821.7	30	46
	1954 --	1 847.3	40	56

See footnotes at end of table.

**Table 7. Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1982 product code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>		
		Total (million dollars)	Percent accounted for by <sup>3</sup> —	
			4 largest companies	8 largest companies
20117 20137	Sausage and similar products (not canned) ----- 1982..	6 508.0	26	37
	1977..	4 680.0	22	31
	1972..	3 264.4	17	26
	1967..	2 286.6	19	30
	1963..	1 756.2	20	29
	1958..	1 526.2	22	29
	1954..	1 187.1	24	31
20118 20138	Canned meats, (except animal feed and baby foods) containing 20 percent meat or more ----- 1982..	1 548.6	53	69
	1977..	1 256.3	36	51
	1972..	1 106.3	41	57
	1967..	856.4	34	53
	1963..	730.1	39	58
	1958..	598.6	42	60
	1954..	583.4	46	63
20161 20171	Young chickens (usually under 20 weeks of age) including broilers, fryers, roasters, and capons (including frozen) (1972 product class 20161) <sup>4</sup> ----- 1982..	6 017.4	32	48
	1977..	3 961.1	22	33
20162 20172	Hens and/or fowl (including frozen, whole or parts) (1972 product class 20162) <sup>4</sup> ----- 1982..	175.6	69	84
	1977..	229.5	48	67
20163 20173	Turkeys (including frozen, whole or parts) (1972 product class 20163) <sup>4</sup> ----- 1982..	1 272.4	40	57
	1977..	927.3	42	59
20164 20174	Other poultry and small game (including frozen, whole or parts) (1972 product class 20164) <sup>4</sup> ----- 1982..	58.9	74	90
	1977..	57.9	75	89
20165 20175	Processed poultry and small game, except soup (1972 product class 20171) <sup>4</sup> ----- 1982..	1 692.3	37	52
	1977..	657.7	42	57
20415 20450	Flour mixes and refrigerated doughs <sup>5</sup> ----- 1982..	2 074.2	59	74
	1977..	1 491.5	48	64
	1972..	796.1	61	75
	1967..	644.9	59	74
	1963..	525.9	60	75
20668 20998	Chocolate and cocoa products, except confectionery ----- 1982..	980.8	69	82
	1977..	888.1	69	81
	1972..	318.4	69	78
	1967..	245.0	70	79
	1963..	212.3	60	71
	1958..	206.7	62	75
22117 22617	Finished cotton broad woven fabrics ----- 1982..	1 161.0	45	70
	1977..	1 192.3	57	73
	1972..	710.8	49	66
	1967..	685.3	41	61
	1963..	724.1	55	69
	1958..	600.2	45	60
	1954..	581.4	41	58
2211A 22219 23922	Sheets and pillowcases <sup>6</sup> ----- 1982..	1 156.3	60	89
	1977..	906.3	59	90
	1972..	634.8	61	91
	1967..	7438.5	62	91
	1963..	7328.8	58	86
	1958..	7239.9	56	76
	1954..	7214.3	50	73
22119 2221A 23923	Towels and washcloths <sup>8</sup> ----- 1982..	964.0	80	94
	1977..	693.0	82	95
	1972..	409.1	66	85
	1967..	9300.2	76	90
	1963..	9226.4	76	87
	1958..	9174.6	75	88
	1954..	9147.7	80	89
22218 22628	Finished manmade fiber and silk broad woven fabrics ----- 1982..	2 933.4	62	71
	1977..	2 430.5	59	75
	1972..	1 175.5	53	70
	1967..	591.1	54	70
	1963..	336.9	53	65
	1958..	157.6	38	58
22825 28246	Textured, crimped, or bulked filament yarns, including stretch yarns (1972 product class 22824 only) <sup>10</sup> ----- 1982..	3 138.0	43	63
	1977..	2 111.4	34	55

See footnotes at end of table.



**Table 7. Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1982 prod- uct code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>		
		Total (million dollars)	Percent accounted for by <sup>3</sup> —	
			4 largest companies	8 largest companies
23412 22542	Women's and children's underwear ----- 1982--	958.0	20	30
	1977--	681.2	17	27
	1972--	489.7	19	30
	1967--	563.6	16	23
	1963--	533.1	11	19
	1958--	<sup>11</sup> 529.6	11	17
	1954--	<sup>11</sup> 534.8	10	15
23413 22543	Women's and children's nightwear ----- 1982--	1 197.9	18	27
	1977--	902.2	20	30
	1972--	642.0	15	24
	1967--	425.7	12	23
	1963--	393.0	11	18
	1958--	<sup>11</sup> 280.7	11	19
	1954--	<sup>11</sup> 244.7	10	17
28744 28750	Mixed fertilizers ----- 1982--	2 237.4	19	32
29117 29920	Lubricating oils and greases ----- 1982--	5 609.7	34	51
	1977--	3 233.3	35	50
	1972--	1 536.9	28	43
	1967--	1 327.0	37	54
32113 32313	Laminated glass ----- 1982--	697.2	67	82
	1977--	707.2	(NA)	(NA)
	1972--	535.4	85	98
	1967--	361.7	85	97
	1963--	317.3	87	98
	1958--	253.8	96	99
	1954--	236.2	94	97
33125 33155	Steel wire (produced in steel mills) ----- 1982--	1 393.0	26	40
	1977--	1 336.1	33	47
	1972--	726.3	35	53
	1967--	678.1	33	51
	1963--	619.4	37	54
	1958--	564.7	44	61
	1954--	465.0	51	65
33126 33176	Steel pipe and tubes (produced in steel mills) ----- 1982--	7 218.6	33	44
	1977--	5 620.4	37	59
	1972--	2 758.5	36	54
	1967--	2 629.1	37	56
	1963--	1 887.5	40	58
	1958--	1 723.6	43	63
33127 33167	Cold rolled steel sheet and strip (produced in steel mills) ----- 1982--	6 977.9	42	71
	1977--	8 582.4	42	68
	1972--	4 267.0	35	59
	1967--	3 161.9	36	60
	1963--	2 856.3	39	64
	1958--	2 091.6	41	64
33128 33168	Cold finished steel bars and bar shapes (produced in steel mills) ----- 1982--	1 264.3	40	55
	1977--	1 331.1	41	60
	1972--	827.5	41	62
	1967--	629.2	43	64
	1963--	472.7	43	66
	1958--	338.9	45	67
3312A 34627	Seamless rolled ring forgings, ferrous (produced in steel mills) (1972 product classes 33129 and 34629) ----- 1982--	254.3	60	81
	1977--	207.5	55	75
3312B 34628	Open die or smith forgings (hammer or press), ferrous (1972 product classes 33129 and 34629) ----- 1982--	747.6	34	50
	1977--	673.6	41	56
33151 34961	Noninsulated ferrous wire rope, cable, and strand (made in wiredrawing plants) ----- 1982--	913.4	25	40
	1977--	610.5	30	48
	1972--	369.9	37	52
	1967--	246.0	49	70
	1963--	189.9	45	69
	1958--	163.4	53	70
33152 34967	Steel nails and spikes ----- 1982--	434.4	35	51
	1977--	447.1	39	58

See footnotes at end of table.

**Table 7. Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1982 prod- uct code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>		
		Total (million dollars)	Percent accounted for by <sup>3</sup> —	
			4 largest companies	8 largest companies
33156 34966	Fencing and fence gates (made in wiredrawing plants) ----- 1982..	446.7	28	45
	1977..	411.6	32	57
	1972..	250.2	30	53
	1967..	127.0	36	59
	1963..	115.5	42	56
	1958..	103.3	45	62
	1954..	92.9	48	68
33157 34964	Ferrous wire cloth and other ferrous woven wire products (made in wiredrawing plants) ----- 1982..	272.4	30	46
	1977..	222.1	34	51
	1972..	128.9	29	47
	1967..	86.4	32	53
	1963..	72.3	31	49
33159 34968	Other fabricated wire products (made in wiredrawing plants) (1972 product class 34969) ----- 1982..	1 636.8	13	22
	1977..	1 265.4	16	26
	1972..	847.5	13	24
	1967..	667.4	15	25
	1963..	501.5	18	27
	1958..	405.4	21	32
	1954..	313.4	23	34
33312 33412	Refined copper ----- 1982..	2 389.0	58	77
	1977..	2 304.5	60	82
	1972..	1 488.8	57	74
	1967..	818.4	48	67
	1963..	668.6	51	66
	1958..	479.7	64	79
33323 33413	Refined lead ----- 1982..	(D)	(D)	(D)
	1977..	(D)	(D)	(D)
	1972..	455.2	66	80
	1967..	358.9	53	66
	1963..	276.4	64	73
	1958..	280.9	65	73
33334 33414	Refined zinc ----- 1982..	454.2	45	66
	1977..	471.3	61	83
	1972..	404.2	55	77
	1967..	316.6	54	81
	1963..	273.7	62	96
	1958..	206.7	49	73
33347 33417 33553	Aluminum ingot ----- 1982..	5 337.4	63	80
	1977..	5 229.2	64	79
	1972..	1 971.2	69	82
	1967..	1 682.4	76	84
	1963..	1 234.7	76	85
33348 33418 33554	Aluminum extrusion billet ----- 1982..	831.1	45	72
	1977..	863.3	51	76
	1972..	320.1	67	84
	1967..	281.1	77	93
	1963..	185.5	80	93
33395 33415	Precious metals and precious metal alloys ----- 1982..	2 077.9	54	77
	1977..	780.4	59	74
	1972..	527.6	67	75
	1967..	282.4	76	88
	1963..	246.4	81	89
	1958..	198.6	77	87
33398 33399 33416	Other nonferrous metals, n.e.c. ----- 1982..	1 044.0	52	69
	1977..	1 036.0	53	73
	1972..	602.7	56	69
	1967..	327.8	43	60
	1963..	193.0	42	60
	1958..	163.3	37	55
33551 33571	Aluminum and aluminum-base alloy bare wire (including ACSR) ----- 1982..	486.4	77	91
	1977..	387.5	67	87
	1972..	216.3	55	82
	1967..	251.9	68	89
	1963..	127.9	77	92
	1958..	100.9	73	89

See footnotes at end of table.



**Table 7. Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1982 and Earlier Census Years—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1982 prod- uct code <sup>1</sup>	Class of product and year <sup>1</sup>	Value of shipments <sup>2</sup>		
		Total (million dollars)	Percent accounted for by <sup>3</sup> —	
			4 largest companies	8 largest companies
33575 34965	Nonferrous wire cloth and other woven nonferrous wire products (made in wiredrawing plants) -----			
	1982--	120.7	55	76
	1977--	104.2	39	62
	1972--	93.9	41	64
	1967--	90.0	44	61
	1963--	70.5	34	55
33576 36996	Apparatus wire and cordage and flexible cord sets -----			
	1982--	648.6	28	43
	1977--	577.8	41	59
	1972--	361.2	46	63
	1967--	287.2	34	52
	1963--	167.7	29	43
	1958--	127.1	37	42

<sup>1</sup>Product classes (five-digit codes) are assigned to the industry to which they are primary. Products which are primary to more than one industry are split according to the industry codes of the establishment producing them. In this table, such products have been combined to yield a wherever-made total. See table 6 for the figures for each product class separately.

<sup>2</sup>Represents, for the combination of numerically coded product classes, total value shipped by all producers in all industries.

<sup>3</sup>Company affiliation is determined from census reports and public records. Value of shipments of products falling within each combination of product codes was aggregated for plants under common ownership and company totals derived to determine the largest producers.

<sup>4</sup>Prior to 1977, all data were collected and published under Industry 2016, Poultry Dressing Plants, product codes only. However, industry 2016 products are defined to include only those products processed at slaughtering plants. Industry 2017, Poultry and Egg Processing, is defined to include the same products but processed from purchased carcasses. In 1977, comparable product classes were created for collecting products primary to both 2016 and 2017 industries.

<sup>5</sup>In 1982, product class 20455 was reclassified as product class 20450. There was no change to the description or content of this product class.

<sup>6</sup>In 1982, Product Classes 22118, Cotton Sheets and Pillowcases (Made in Weaving Mills), and part of 22110, Other Fabricated Cotton Textile Products (Made in Weaving Mills), Including Fabrics, N.S.K., were reclassified as product classes 2211A and 22110. Furthermore, in 1982, product class 23928 was reclassified as product class 23922. There was no change to the description or content of this product class.

<sup>7</sup>Prior to 1972, manmade fiber sheets and pillowcases were included in product class 22118. Beginning with 1972, these data are included in 22219.

<sup>8</sup>In 1982, Product Class 22210, Other Fabricated Manmade Fiber and Silk Textile Products (Made in Weaving Mills), Including Fabrics, N.S.K., was reclassified as product classes 2221A and 22210. Furthermore, in 1982, product class 23929 was reclassified as product class 23923. There was no change to the description or content of this product class.

<sup>9</sup>Prior to 1972, manmade fiber towels and washcloths were included in product class 22119. Beginning with 1972, these data are included in 22210 15.

<sup>10</sup>In 1977, old product class 22824 was reclassified as product classes 22825 and 28246.

<sup>11</sup>Represents value of production rather than value of shipments.

# APPENDIX A.

## Explanation of Terms

**Number of establishments and companies**—As discussed in the Introduction, a separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operates at different physical locations, even if the individual locations are producing the same line of goods, a separate report was requested for each location. If the company operates in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on the number of custodial employees, capital expenditures, inventories, or any shipments from inventories during the portion of the year the plant was in operation.

In this report, data are shown for establishments in operation at any time during the year. A comparison with the number of establishments in operation at the end of the year will be provided in the Introduction to Part 1 of the General Summary subject report.

**Employment and related items**—The regular report forms requested separate information on production workers as of a payroll period for each quarter of the year and on other employees as of the payroll period which included the 12th of March.

**All employees**—This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

**Production workers**—This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

**All other employees**—This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office function, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment who are engaged in the construction of major additions or alterations to the plant and who are utilized as a separate work force.

In addition to reports sent to operating manufacturing establishments, information on employment during the payroll period which included March 12 and annual payrolls was also requested of auxiliary units (e.g., administrative offices, warehouses, and research and development laboratories) of multiestablishment companies. However, these figures are not included in the totals for individual industries shown in this report. They are included as a separate category.

**Payrolls**—This item includes the gross earnings of all employees on the payroll of operating manufacturing establishments paid in the calendar year 1982. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations, but excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payroll of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

As in the case of employment figures, the payrolls of separate auxiliary units of multiestablishment companies are not included in the totals for individual industries or industry groups.

**Production-worker hours**—This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

**Cost of materials**—This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies,



transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (1) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year, (2) electric energy purchased, (3) fuels consumed for heat, power, or the generation of electricity, (4) work done by others on materials or parts furnished by manufacturing establishments (contract work), and (5) products bought and resold in the same condition. (See discussion of duplication of data below.)

**Value of shipments**—This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and resold without further processing. Included are all items made by or for the establishments from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of "all other costs" (including company overhead) and profit. (See discussion of duplication of data below.)

**Duplication in cost of materials and value of shipments**—The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication, since the products of some industries are used as materials by others. With some important exceptions, such as for motor vehicles and parts, this duplication is not significant at the four-digit industry level. However, it is significant at the two-digit and three-digit industry group level because these totals often include industries that represent successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the "Food" group and the addition of pulp mills to paper mills in the "Paper and Allied Products" group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the census of manufactures.

**Value added by manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

Because of the change in instructions for reporting inventories for 1982, the 1982 figure for value added is not strictly comparable to prior-year data. This is explained more fully in the inventories section below.

"Value added" avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**New capital expenditures**—For establishments in operation and establishments under construction but not yet in operation, manufacturers were asked to report their new expenditures for (1) permanent additions and major alterations to manufacturing establishments, and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

The totals for new expenditures exclude that portion of expenditures leased from nonmanufacturing concerns, new facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Also excluded are expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expenses.

**End-of-year inventories**—Respondents were asked to report their 1981 and 1982 end-of-year inventories at cost or market. Effective with the 1982 Economic Censuses, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). In 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Because of this change in reporting instructions, the 1982 data for inventories and value added by manufacture included in table 1 of this report are not comparable to the prior-year data shown in historical annual survey of manufactures publications.



# **APPENDIX B.**

## **Annual Survey of Manufactures (ASM) Sampling and Estimating Methodologies**

### **DESCRIPTION OF SURVEY SAMPLE**

The Annual Survey of Manufactures (ASM) contains two components. The mail portion of the survey is a probability sample of about 55,000 manufacturing establishments selected from a total of about 225,000 establishments. These 225,000 establishments represent all manufacturing establishments of multiunit companies and all single-unit manufacturing establishments with five employees or more tabulated in the 1977 Census of Manufactures. This mail portion is supplemented by a Social Security Administration list of new manufacturing establishments opened after 1977. The individual establishments were defined as the sampling unit for this sample. This is a change from the previous ASM sample when companies were used as the sampling unit. The implication of this change is that the probability of selection of any establishment relates only to the size of the establishment itself and is independent of the size of the company with which the establishment is affiliated. The efficiencies associated with the change to an establishment sample have made it possible to reduce the mail sample panel from 70,000 establishments in 1978 to 55,000 establishments in the current panel.

The nonmail portion of the survey includes all single-unit establishments that were tabulated with less than five employees in the 1977 Census of Manufactures. Although this portion contained approximately 125,000 establishments, it accounted for less than 2 percent of the estimate for total value of shipments at the total manufacturing level. This portion was not sampled; rather, the data for every establishment in this group were estimated based on selected information obtained annually from the administrative records of other Federal agencies. This administrative record information, which includes payroll, total employment, industry classification, and physical location of the establishment, was obtained under special conditions, which safeguard the confidentiality of both tax and census records. Estimates for data for these small establishments were developed using industry averages in conjunction with the administrative information.

The corresponding estimates for the mail and nonmail establishments were added together, along with the adjusted base-year differences as defined in Description of Estimating Procedures below. The remaining description of the survey sample relates only to the mail portion of the ASM sample.

All establishments with 250 employees or more in the 1977 census were included in the survey panel with certainty. These establishments collectively account for approximately 65 percent of the total value of shipments for manufacturing establishments in the 1977 census. Smaller establishments were sampled with probabilities ranging from 1.000 down to 0.005 in accordance with mathematical theory for optimum allocation of a sample.

The probabilities of selection assigned to the smaller establishments were proportional to measures of size determined for each establishment. For establishments included in the 1977 Census of Manufactures, the measure of size depended directly upon each establishment's 1977 product class values and the

historic variability of the year-to-year shipments of each product class. Roughly equivalent measures of size were assigned to postcensus birth establishments based on their industry codes and anticipated payroll and employment.

The method of assigning measures of size was used in order to maximize the precision (that is, minimize the variance of estimates of the year-to-year change) in the value of product class shipments. Implicitly, it also gave weight to differences in employment, value added, and other general statistics, for these are highly correlated with value of shipments. Individual sample selection probabilities were obtained by multiplying each establishment's final measure of size by an overall sampling fraction coefficient calculated to yield a total expected sample size.

The sample selection procedure gave each establishment in the sampling frame an independent chance of selection. This method of independent selection permits the rotation of establishments into and out of a given sample panel without introducing a bias into the survey estimates.

### **DESCRIPTION OF ESTIMATING PROCEDURES**

Most of the ASM estimates for the years 1978-1981 were computed using a modified "difference estimate" formula. For each item, a base-year difference was developed. This base-year difference is equal to the difference between the 1977 census published number for an item total and the linear ASM estimate of the total for 1977. The ASM linear estimate was obtained by multiplying each sample establishment's data by its sample weight (the reciprocal of its probability of selection) and summing the weighted values.

This base-year difference was then adjusted to reflect the estimated growth at the four-digit or, in the case of product classes, five-digit based Standard Industrial Classification (SIC) level from 1977 to the year of the survey; for example, 1981. It should be noted that due to processing constraints, the growth factors lagged one year; i.e., if 1981 is the survey year, they were not based on the estimated growth from 1977 to 1981 but rather the growth from 1977 to 1980. This one-year lag had negligible effect on the estimates, particularly at the total manufacturing level where the adjusted base-year difference accounted for less than 1 percent of the estimate for total value of shipments.

These adjusted base-year differences were then added to the corresponding current-year linear estimates, which include the sum of the estimates for the mail and nonmail establishments, to produce the estimates for the years 1978-1981. Estimates developed by this procedure usually are far more reliable than comparable linear estimates developed from the current sample data alone.

The 1982 sample data included in table 3b were also developed using difference estimates. However, since the universe totals for the census year (1977 or 1982) were not known, a modification of the procedure described above was necessary. For each item in table 3b, except purchased services and breakdown of expenditures for new machinery and equipment (see further description in appendix A, section 2), linear



estimates of the publication totals from the ASM mail sample were adjusted by the difference between imputed census totals and the corresponding ASM mail sample estimates of these imputed totals. These imputed totals are obtained by applying industry average ratios to control item values at the establishment level. For example, an imputed total beginning assets figure is obtained by multiplying each establishment's total value of shipments by the industry (four-digit SIC) average for the ratio of beginning assets to shipments.

Separate estimates for the nonmail establishments were not developed. However, their contribution to the publication estimates is reflected in the difference adjustment.

## QUALIFICATIONS OF THE DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sampled lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the differences between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretical, comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. They are presented in the form of relative standard errors, the standard errors divided by the estimated values to which they refer.

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete coverage value would be included in the range:

1. From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
2. From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
3. From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown as 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total and about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors would also occur if a complete canvass were to be conducted under the same conditions as the survey.

Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or only moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown.

The concept of complete coverage under the conditions prevailing for the ASM is not identical to the complete coverage of the census of manufactures, as the censuses have been conducted. Nearly all types of operational errors that affect the ASM also occur in the censuses. The ASM and the censuses, are conducted under quite different conditions, and operational errors can be better controlled in the ASM than in the censuses. As a result, for many of the census figures, the errors are of the same order of size as the total errors of the corresponding annual survey estimates. The differences between the census and ASM operating conditions also disturb, to some degree, the comparability of the ASM and census data.

Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be of limited reliability. However, the figure may be combined with higher-level totals, creating a broader aggregate, which then may be of acceptable reliability.

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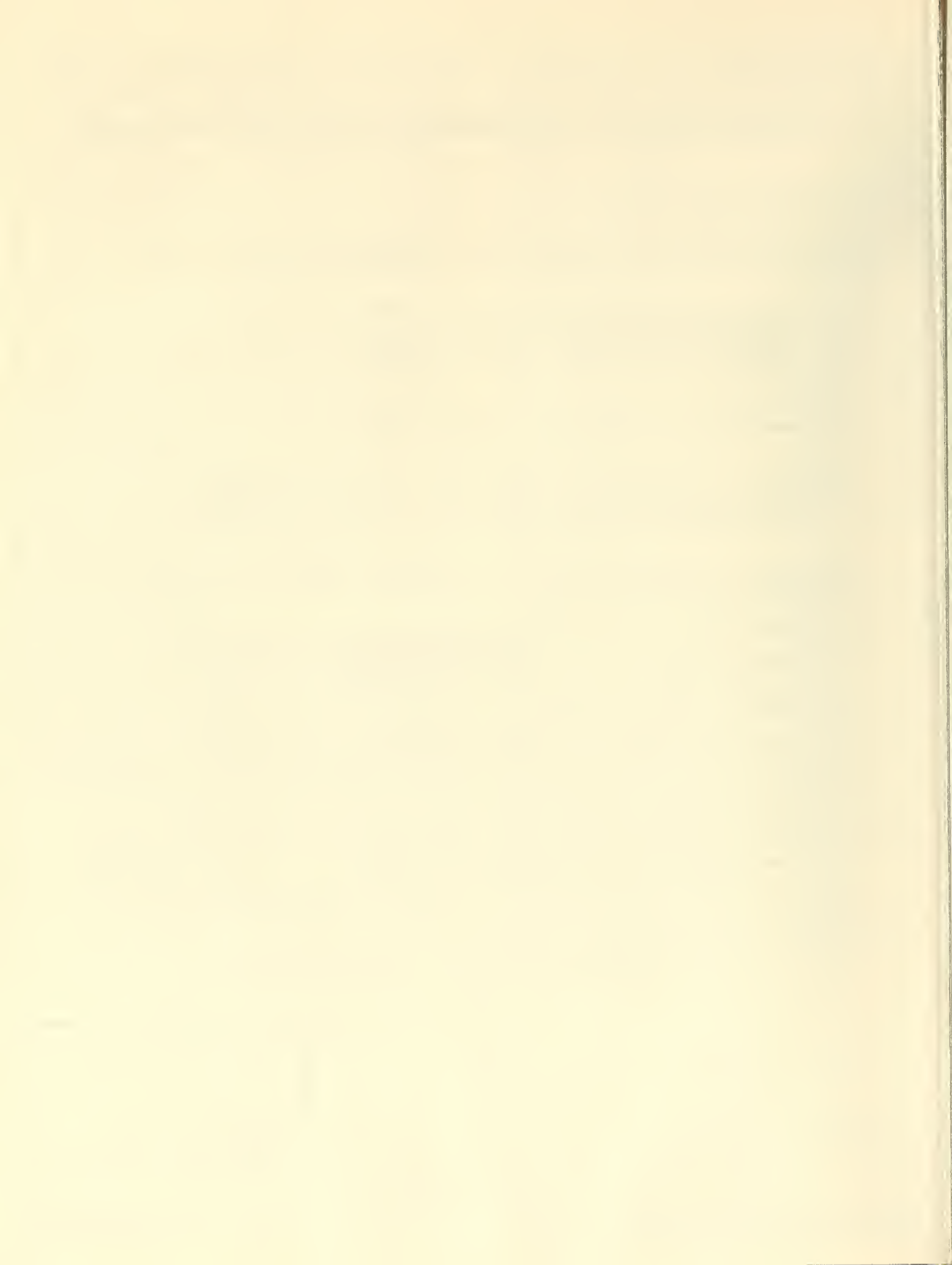
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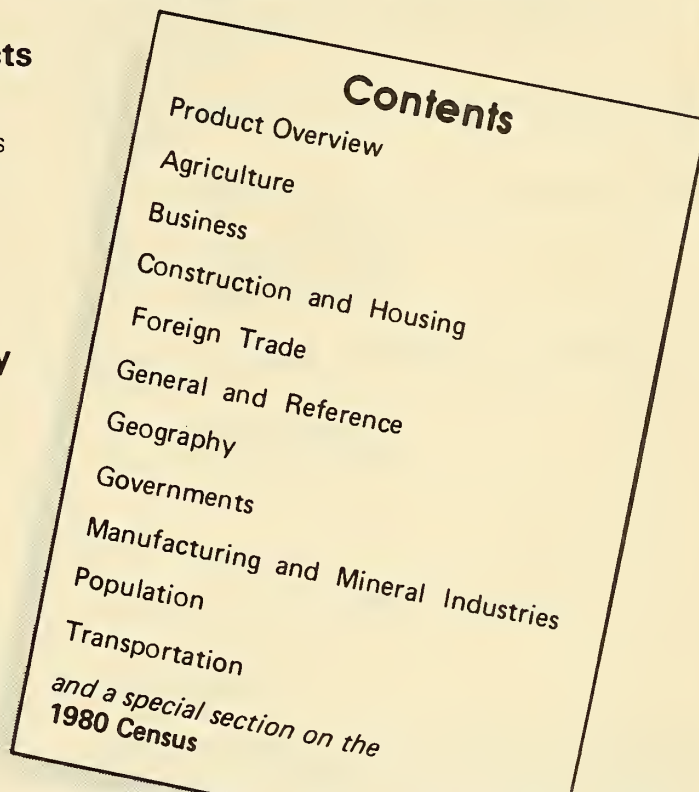
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1. The first part of the paper discusses the general theory of the problem. It begins with a review of the existing literature and then presents a new approach to the problem. The author argues that the existing literature has been too narrow in its scope and that a more comprehensive approach is needed. This approach is based on the idea that the problem is not just a matter of finding a solution, but of understanding the underlying principles that govern the system. The author then presents a series of experiments that test this approach and shows that it is more effective than the existing methods.

2. The second part of the paper discusses the application of the theory to a specific problem. The author shows how the theory can be used to predict the behavior of the system and how it can be used to design a more efficient system. The author also discusses the limitations of the theory and the need for further research. The paper concludes with a summary of the findings and a list of references.

# PUBLICATION PROGRAM

## 1982 CENSUS OF MANUFACTURES

Publications of the 1982 Census of Manufactures, containing preliminary and final data on manufacturing establishments in the United States, are described below. Publication order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233

### Preliminary Reports

Preliminary industry data are issued in 443 separate reports covering 452 industries (or combinations of industries). Preliminary data for States are grouped and released in reports for each of the nine census geographic divisions.

### Final Reports

Final detailed statistics are issued in separate paperbound reports.

#### Industry series—82 reports (MC82-I-20A to -39D)

Each of the 82 reports provides information for a group of related industries (e.g., "dairy products" includes industries for butter, cheese, milk, etc.). Final figures for the United States are shown for each of the 452 manufacturing industries on quantity and value of products shipped and materials consumed, cost of fuels and electric energy, capital expenditures, assets, rents, inventories, employment, payroll, payroll supplements, hours worked, value added by manufacture, number of establishments, and number of companies. Comparative statistics for earlier years are provided where available.

For each industry, data on value of shipments, value added by manufacture, capital expenditures, employment, and payroll are shown by employment-size class of establishment and degree of primary product specialization. Statistics are given on production of specific products and consumption of energy and various materials by industry.

#### Geographic area series—51 reports (MC82-A-1 to -51)

A separate report for each State and the District of Columbia presents data for industry groups and industries on value of shipments, cost of materials, value added by manufacture, employment, payroll, hours worked, new capital expenditures, and number of manufacturing establishments for the State, SMSA's, and large industrial counties and places. Comparative statistics for earlier census years are shown for the State and large SMSA's. Manufacturing totals are presented for each county and for places with significant manufacturing activity. Detailed statistics—including inventories, assets, rents, and energy costs—are presented only in statewide totals.

#### Subject series—10 reports (MC82-S-1 to -10)

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### Final Report Volumes

Final paperbound reports subsequently are assembled and reissued in clothbound volumes.

- Volume I. Summary and Subject Statistics—data previously issued in series MC82-S.
  - Part 1. Major Groups 20 to 26
  - Part 2. Major Groups 27 to 34
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- Volume II. Industry Statistics—data previously issued in series MC82-I.
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  - Part 1. Alabama to Montana
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### Microfiche

All published data also are available on microfiche.

### Computer Tapes

Selected data—generally detailed information by industry and/or geographic area—also are available on public-use computer tapes. For the selected data, these tapes will provide the same information found in the final reports. Public-use computer tapes are available for users who wish to summarize, rearrange, or process large amounts of data. These tapes, with corresponding technical documentation, are sold by Data User Services Division, Customer Services (Tapes), Bureau of the Census, Washington, D.C. 20233.

## OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, construction industries, mineral industries, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U. S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.



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